DOCUMENT RESUME

ED 482 808 JC 030 692

TITLE Contra Costa Community College District Transfer Education Report.

INSTITUTION Contra Costa Community Coll. District, Martinez, CA.

PUB DATE 2002-01-00

NOTE 104p.; Prepared by the Office of District Research, Planning and Resource Development.

PUB TYPE Information Analyses (070) -- Numerical/Quantitative Data (110) -- Reports - Descriptive (141)

EDRS PRICE EDRS Price MF01/PC05 Plus Postage.

DESCRIPTORS Community Colleges; Institutional Cooperation; Institutional Role; *Outcomes of Education; School Effectiveness; Student Mobility; Transfer Policy; *Transfer Programs; *Transfer Students; *Two Year College Students; Two Year Colleges

IDENTIFIERS *Contra Costa Community College District CA

ABSTRACT

This research report from Contra Costa Community College District (CCCCD), California, summarizes relevant findings from assessments of the performance of students receiving transfer education, and CCCCD's progress in meeting its Partnership for Excellence (PFE) goals in this area. Findings reported include the following: (1) Student Goal Attainment--No data are available and steps are being taken to correct the problem; (2) Transfer Course Success Rates--CCCCD continues to show an increase in the percentage of students who successfully complete their transfer course work, with a 71.8% success rate for 1999-2000; (3) Transfer Statistics/Number Transferred--The number of students CCCCD sent to University of California campuses in 2000-01 increased by 18% over 1995-96 totals--On the other hand, the number of transfers to California State University campuses decreased in the same period by 13.3%; (4) Transfer Statistics/Number Eligible--CCCCD's 1999-2000 total of transfer-prepared students declined by 15.1% from its 1997-98 level; (5) Academic Performance after Transfer--Findings indicate that on average, CCCCD is preparing its transfer students as well as are other California Community College districts; and (6) Degree Completion Rate--Because an associate degree is not required to transfer, it is not surprising that the number of associate degrees awarded by CCCCD has been declining over the years. (Contains 36 tables and more than 250 references.) (NB)

Reproductions supplied by EDRS are the best that can be made from the original document.

ED 482 808

The Colleges of
Contra Costa

pathways to success

Contra Costa Community College District

TRANSFER EDUCATION REPORT

January 2002

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

S. Fox

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

JC030692

Office of District Research
Planning and Resource Development
Contra Costa Community College District
500 Court Street
Martinez, California 94553

BEST COPY AVAILABLE

Executive Summary

This report is the second of four mission specific topics scheduled for the 2001-02 agenda of the Governing Board. It provides an overview of the legislative and administrative context of the transfer process and profiles transfer education, statewide and at Contra Costa Community College District (CCCCD). It is hoped that the information in this report will prove useful in ongoing districtwide discussions regarding transfer education.

Overview

Historical, Policy, and Institutional Context

Transfer education provides students the lower-division coursework required for a baccalaureate degree which, when successfully completed, allows them to transfer to the upper-division programs of four-year postsecondary educational institutions. Transfer education has long been a central mission of American Community Colleges and is frequently referred to as the "transfer function". In California, this mission was first formalized in the state's 1960 Master Plan for Public Higher Education, and it has been reaffirmed in subsequent legislation and education code.

Like its counterparts elsewhere, CCCCD supports the transfer function through a unique array of transfer education and related student service programs consistent with its mission priorities. The viability of the transfer function throughout the California Community College system is essential for insuring that students, do not go directly to a four-year institution upon completion of high school, have the opportunity to do so. Additionally, California Community Colleges are strategically positioned to provide this and all other student populations with continued access to educational opportunities and to ensure that the characteristics of students served by public postsecondary institutions reflect the demographics of the state. The viability of the transfer function at California Community Colleges is thus an essential component of society's efforts to ensure equal access to educational opportunities.

Transfer Bound Students and Transfer Eligibility Criteria

As a student works to obtain transfer eligibility status, he or she must consider, of course, the transfer requirements of the targeted institution. These requirements have changed considerably over the years and these changes have frequently been the source of much confusion and grief. To clarify this situation, this report provides a recent summary of the most current transfer requirements of UC, CSU, and other four-year postsecondary institutions.

The Transfer Process

The process by which college students who are enrolled at one postsecondary education institution seek to continue their education at another is know as the "transfer process". This process, which varies with targeted transfer institution, can be bewildering for community college students. This report outlines the general sequence of events and steps that community college students typically follow in order to transfer successfully. These include commentary on the development of an educational plan, enrollment in appropriate courses, maintaining performance standards, and timing of transfer process with student services of targeted institution.

Transfer Programs and Services

Concerns about the vitality of the transfer function have helped to bring into existence an array of statewide transfer programs/services. Since the mid-1980's, several intersegmental initiatives to improve the transfer process have been established by the state's Governor and Legislature. This report reviews the key programs these initiatives have given rise to, including: The California Articulation Numbering (CAN); The Intersegmental General Education Transfer Curriculum (IGETC); Articulation System Stimulating Interinstitutional Transfer Project (ASSIST); and The Intersegmental Major Preparation Articulated Curriculum (IMPAC).

New Transfer Initiatives and Challenges to a Successful Transfer Process

Also noted in this report are major policy initiatives recently adopted by the Governor and Legislature that are designed to direct state resources towards improving student transfer and a critique by the California Postsecondary Education Commission (CPEC) on the major challenges to a successful transfer process. These challenges include the need to: (1) research and evaluate issues of transfer "supply" and "demand," in order to establish reasonable parameters for State transfer expectations; (2) examine the many segment-specific and intersegmental transfer programs and initiatives currently in force to assure that they are functioning in a coordinated, effective and cost-effective manner; and (3) sponsor forums and workshops for transfer programs directors and staff to facilitate information exchanges, develop methods for increased coordination of activities, reduce current redundancies in some transfer efforts, and garner greater commitments to State goals from all stakeholders.

Transfer Education and the California Community College System

This report provides a statewide overview of the flow of CCC transfers to CSU, UC, and member institutions of the Association of Independent California Colleges and Universities (AICCU) as well as their upper-division performance where possible.

Transfer Access

Several findings are reported concerning the institutions to which students from the California Community Colleges (CCC) transfer, including:

1. Most transfers to CSU and UC continue to come from CCC. In 1999-00, for example, 83% and 74% of transfers to CSU and UC, respectively, came from CCC. The numbers of transfers from CCC to CSU show a 4.7% increase since 1997-98 following a three-year decline, whereas, the total from CCC to UC has been decreasing until 1999-00 which showed 6.6 increase over the prior year. Transfers from out of state have been increasing, especially at UC which has seen an increase 39.6% of these latter transfer students over their 1993-94 totals. (See Table 3).

2. The top five CSU campuses for 1999-00, in terms of their CCC transfer totals, are Fullerton, Sacramento, Northridge, Long Beach, San Diego. At UC, the top five campuses sought by CCC transfers in 1990-00 were Los Angeles, Berkeley, Davis, Santa Barbara, and San Diego. (See Tables 4-5)

3. With the decline in the total number of CCC transfers to CSU and UC for the 1995-98 period, there has been a corresponding decline in the number of minority transfers. For 1999-00, there was a small increase over the prior year of Black, Filipino, and Latino but not Asian and Native American transfers to CSU. At UC, all ethnic minority transfers show a similar decline and slight increase for 1999-00 over 98-99 levels with the exception of Native Americans. (See Tables 6-7)

4. Whereas transfer totals declined for UC and CSU for the 19995-98 interval, they actually increased by 8.7% for California Independent Colleges and Universities. The top five private institutions that received the most CCC transfers for the 1990-99 period were National University, University of Southern California, University of San Francisco, Chapman University, and Point Loma Nazarene University. (See Tables 8-9)

5. The percent and number of CCC transfers to both CSU and UC that were admitted decreased from 1996-97 to 1998-99; however, the percent of transfers that enrolled in these systems during this time increased by 7.5% for CSU and 2.9% for UC, with increases observed for all ethnic groups as well. While the percent of admitted CCC transfers increase from 1998-99 to 1999-00, the percent of enrolled transfers decreased slightly. Noteworthy is the finding that among 1999-00 applicants, 12,318 or 23.5% of admitted CCC transfers to CSU and 3,600 or 28.3% of admitted CCC transfers to UC did not enroll. It is possible that those admitted to CSU but who did not enroll may have had the option to enroll at UC, and visa versa. The enrollment increases in these systems over the prior year do not support this position. A study seems in order to determine where these students are going. These are transfers that will not get considered in the evaluation of Partnership for Excellence goals of CCC. (See Tables 10-11)

Transfer Outcomes

Available data on the performance of California Community College (CCC) transfers to CSU and UC give evidence that they are well prepared to compete academically. Several findings are reported, including:

1. The persistence and graduation rates of Regularly Admitted CCC transfers to CSU and UC who entered Fall 1994 were markedly higher than the same rates for CCC transfers who entered Fall 1990. (See Tables 12-15)

2. The persistence and graduation rates of Regularly Admitted CCC transfers to CSU and UC who entered Fall 1990 and Fall 1994 compare favorably with those for their native student counterparts at these respective institutions. (See Tables 12-15)

3. The persistence and graduation rates of upper-division CCC transfers with disabilities to CSU and UC who entered Fall 1993 and Fall 1994 compare favorably with those for their native student counterparts at these respective institutions. (See Tables 12-15)

Transfer Education, Assessment, and Mission at CCCCD

Over the last several years, CCCCD has moved to develop institutional effectiveness indicators to gauge its progress along key educational dimensions. Parts of CCCCD's Institutional Effectiveness 2000 Report regard the performance of students receiving transfer education and the progress of CCCCD in meeting its Partnership for Excellence (PFE) goals in this area. This report summarizes relevant findings from these two assessment efforts.

Outcome Assessment of Transfer Function: Institutional Effectiveness Indicators

Several findings are reported, including:

1. **Student Goal Attainment**: No data are available at this time to gauge the percent of transfer bound students who achieve transfer eligibility status. The reasons for this state of affairs and actions being taken to correct it are discussed.

2. **Transfer Course Success Rates**: CCCCD continues to show an increase in the percent of students who successfully complete their transfer coursework (i.e., a grade of "c": or better). CCCCD's successful transfer course completion rates compare favorably with the average rates of other institutional benchmarks: the Bay Area's ten community college districts, multi-college community college districts in the state, and the California Community College system.(See Tables 19a and 19b)

3. **Transfer Statistics -- Number Identified as Having Transferred**: The number of students CCCCD sent to UC in 2000-01 showed an 18% increase over 1995-96 totals, whereas, Bay 10 institutions and multi-college districts increased their transfer totals by 2.7% or less for this same interval. Los Rios CCD and CCCCD have the highest totals of UC transfers among multi-college districts. The number of CCCCD transfers to CSU in 2000-01, on the other hand, has decrease by 13.3% from 1995-96 totals; the Bay 10 and other multi-districts have shown, respectively, declines of 14.7% and 3.5% for this same period. Los Rios, Coast, Foothill-DeAnza, the State Center, and CCCCD have been the top five among multi-college districts with respect to their CSU transfer totals. The reasons for the finding that Bay Area community colleges have experienced a decline in CSU transfers while others in the state have not are not apparent. The relative distribution of these transfers to CSU and UC is similar to what was observed for all California Community College transfers statewide. (See Tables 20a to 22c)

   For the 1997-98 to 2000-01 period, a substantial number of CCCCD transfers to UC and CSU were minority students: 77% of CCC transfers tend to be minority students and around 50% of these are Asian/Pacific Islanders and Black; about 44% of DVC transfers tend to be minority and around 33% of these are Asian/Pacific Islanders and Latino; and 46% of LMC transfers tend to be minority and around 30% are Black and Latino. (See Table 22)

An additional 179 CCCCD students transferred to private postsecondary institutions Fall 2000; 40 or 22% of these were minority students. Saint Mary's College received the largest number of these students (47 or 26%) and six other institutions received five or more transfers: California College of Arts and Crafts, John F. Kennedy University, National University, Simpson College, and the University of San Francisco. (See Tables 23 to 24c)

4. **Transfer Statistics: -- Number Identified as Transfer Eligible**: CCCCD's 1999-00 total of transfer prepared students declined by 15.1% from its 1997-98 level, whereas the Bay 10 and other multi-college districts declined by 7% and 9% respectively. One possible explanation for this decline is that students may be transferring to four-year post-secondary institutions that, unlike UC and CSU, do not require them to complete 56 units before they can be "transfer eligible" as defined by the State Chancellor's Office. Another possibility is that students who would ordinarily be transfer candidates are becoming employed full-time before completion of 56 units. (Tables 25a and 25b)

5. **Academic Performance after Transfer (Grade Point Average and Persistence rates)**: Pre-admission GPAs of CCCCD transfers to CSU Fall 1999 to be equal to or exceeded the GPA for all community college transfers to CSU, varying from 2.93 to 2.97. The first-year GPA and persistence rates of CCCCD transfer students to CSU is not significantly different than the 2.90 and 84% that was achieved by all CCC transfers respectively, with the exception of CCC transfers who averaged a GPA of 2.77 and a persistence rate of 77%. With one exception, transfers with lower-division status did not perform as well as did transfers with upper-division status. These findings suggest that on average CCCCD is preparing its CSU transfers as well as other districts. No comparable district/college specific data is available at this writing for UC transfers. (See Tables 26a -26f)

6. **Degree Completion Rate**: Historically, the number of awards achieved by students has been used as an indicator of how well students were being prepared to transfer to four-year institutions. Currently, a student needs 56 units of transfer coursework and the GPA required by the target institution to transfer -- an associate degree is not necessary for the student to transfer. Not too surprisingly, the number of associate degrees given by CCCCD has decreased over the years. (See Tables 27a and 27b)

Outcome Assessment of Transfer Function: Partnership for Excellence Transfer Goals

The relation of several outcome measures to 2005-06 PFE goals were discussed, including:

1. **Increase in Number of Transfer Students**: CCCCD's goal to increase the annual number of UC transfers from 511 to 681 seems reachable at this time given its total of 603 for 2000-01. Its goal to increase CSU transfers totals from 1,650 to 2,178, however, will require concerted effort, given its total of 1,431 for 2000-01. (See Table 28)

2. **Increase in Number of Students Who Become Transfer Prepared to CSU and UC**: CCCCD's goal of increasing its number of transfer prepared students from 2,982 to 3,789 does not seem very likely at this time given that it had 2,531 such students in 1999-00. CCCCD will have to seriously reconsider the strategies it is using for reaching this goal. Changes in the total of transfer prepared students can reflect many factors, including: the increasing number of options for transfer bound students to attend four-year institutions other than UC and CSU; the growing number of popular majors that do not have openings at UC/CSU and that prevent CCCCD students from transferring to these institutions; and the increasing number of attractive job opportunities. (See Table 29)

3. **Increase in Successful Transfer Course Completion Rates**: CCCCD will very likely meet its PFE goal of increasing transfer course completion rates from 70% to 72.5% given that it achieved a rate of 71.6% in 1999-00. (See Table 30)

TABLE OF CONTENTS

Executive Summary i

List of Tables viii

Overview of Transfer Education 1

    Historical, Policy, and Institutional Context 1

    Students 2

    The Transfer Process 4

    Transfer Programs and Services 7

    Policy Initiatives on Transfer 10

    Challenge to a Successful Transfer Process 11

Transfer Education and the California Community College System 13

    Transfer Access 13

    Transfer Outcomes 23

Transfer Education, Assessment, and Mission at CCCCD 31

    Outcome Assessment of Transfer Function 31

    Institutional Effectiveness Indicators 31

        Student Goal Attainment 31

        Transfer Course Success Rates 32

        Transfer Statistics 45

        Academic Performance After Transfer 45

    Partnership for Excellence Goals 52

        Increase in Number of Transfer Students 52

        Increase in Number of Transfer Prepared Students 52

        Increase in Successful Transfer Course Completion Rates 52

Next Steps 56

    Programs and Services That Support Transfer Success 56

    Challenges in Transfer Education at CCCCD 59

    List of Participants 61

Addendum 1: List of Bay 10 and Multi-College Districts 63

Addendum 2: Glossary 64

Addendum 3: County and College Service Area Demographics 69

Addendum 4: References 73

LIST OF TABLES

Table 1: UC Transfer Advisement Tool for Counselors 6

Table 2: CPEC Agenda Document 10

Table 3: Origins of New Undergraduate Transfer Students to the California State University and the University of California, 1993-94 to 1999-00 14

Table 4: New Community College Transfer Students at the California State University, by Campus, 1997-98 to 1999-00 15

Table 5: New Community College Transfer Students at the University of California, by Campus, 1997-98 to 1999-00 16

Table 6: Full-Year Community College Transfers by Racial/Ethnic Group and Gender to the California State University, 1995-96 to 1999-00 17

Table 7: Full-Year Community College Transfers by Racial/Ethnic Group and Gender to the University of California, 1995-96 to 1999-00 18

Table 8: Community College Transfers Enrolling at Fifty California Independent Colleges and Universities, Fall 1994 to Fall 1999 19

Table 9: California Community College Transfer Students to Fifty-Seven AICCU Institutions, 1990-1999 20

Table 10: Disposition of Unduplicated Applications for Admission by Racial/Ethnic Group for Upper Division California Community College Transfer Students at the California State University, 1996-97 to 1999-00 21

Table 11: Disposition of Unduplicated Applications for Admission by Racial/Ethnic Group for Upper Division California Community College Transfer Students at the University of California, 1996-97 to 1999-00 22

Table 12: Five-Year Persistence Rates of Freshman and Three-Year Rates for Upper Division Community College Transfer Students Regularly Admitted at California's Public Universities, Fall 1990 and Fall 1994 24

Table 13: Five-Year Persistence Rates of Freshman and Five-Year Rates for Lower Division Community College Transfer Students "Admitted by Exception" at California's Public Universities, 1990 and 1994 25

Table 14: Four-Year Persistence Rates of Freshmen with Disabilities and Three-Year Rates for Upper Division Community College Transfer Students with Disabilities, Fall 1995 at the California State University and Fall 1994 at the University of California 26

Table 15: One-Year Persistence Rates for First-Time Freshmen and Lower Division Community College Transfer Students "Admitted by Exception," Fall 1993 to Fall 1998 Matriculants 27

Table 16: Persistence, Graduation, and Time-to-Degree Upper Division Community College Transfers to UC 28

Table 17: Pre-Baccalaureate Certificates Awarded at the California Community Colleges by Discipline, 1993-94 to 1998-99, with Change Between 1993-94 and 1998-99 29

Table 18: Associate Degrees Awarded at the California Community Colleges by Discipline, 1993-94 to 1998-99, with Change Between 1993-94 and 1998-99 30

Table 19a: Changes in Overall Rate of Successful Course Completion Over 1995-96 Performance Levels for Transfer Courses 33

Table 19b: Successful Transfer Course Completion Rates for CCCCD Compared with Average Such Rates of Bay 10, Multi-College Districts, and System 33

Table 20a: Number of Transfer to UC and CSU 35

Table 20b: Number of Transfers for CCCCD Compared with Average Number of Transfers for Bay 10 and Multi-College Districts 35

Table 21a: Contra Costa College 1999-2000, The California State University Campus Destinations for Fall 1999, California Community College Transfers 36

Table 21b: Diablo Valley College 1999-2000, The California State University Campus Destinations for Fall 1999, California Community College Transfers 37

Table 21c: Los Medanos College 1999-2000, The California State University Campus Destinations for Fall 1999, California Community College Transfers 38

Table 22: The Distribution of California Community College Transfer Students to UC and CSU, Full-Year 1997-8, 1998-99, 1999-00, and 2000-01 39

Table 23: Number of CCCCD Transfers to Independent Institutions 41

Table 24a: Community College Students Who Transfer to AICCU Member Institutions, Fall 2000, Contra Costa College 42

Table 24b: Community College Students Who Transfer to AICCU Member Institutions, Fall 2000, Diablo Valley College 43

Table 24c: Community College Students Who Transfer to AICCU Member Institutions, Fall 2000, Los Medanos College 44

Table 25a: Changes in the Number of Students Who Became Transfer Prepared 46

Table 25b: Changes in the Number of Students Who Became Transfer Prepared Compared with Average Number for Bay 10 and Multi-College Districts 46

Table 26a: Pre-Admission Grade Point Average for Fall 1999 Contra Costa College and California Community College Transfers to CSU by Lower and Upper Division Status 47

Table 26b: CSU First-Year Persistence Rates and GPA for Fall 1999 Contra Costa College and California Community College Transfers to CSU by Lower and Upper Division Status 47

Table 26c: Pre-Admission Grade Point Average for Fall 1999 Diablo Valley College and California Community College Transfers to CSU by Lower and Upper Division Status 48

Table 26d: CSU First-Year Persistence Rates and GPA for Fall 1999 Diablo Valley College and California Community College Transfers to CSU by Lower and Upper Division Status 48

Table 26e: Pre-Admission Grade Point Average for Fall 1999 Los Medanos College and California Community College Transfers to CSU by Lower and Upper Division Status 49

Table 26f: CSU First-Year Persistence Rates and GPA for Fall 1999 Los Medanos College and California Community College Transfers to CSU by Lower and Upper Division Status 49

Table 27a: Number of Degrees and Certificates Awarded 50

Table 27b: Number of Degrees and Certificates Awarded by CCCCD Compared with Average Number of Awards by Bay 10 and Multi-College Districts 51

Table 28: Changes in the Number of Students Who Transfer to UC and CSU Over 1997-98 Levels 53

Table 29: Changes in the Number of Students Who Came Transfer Prepared Over 1997-98 Levels 54

Table 30a: Changes in Overall Rate of Successful Course Completion Over 1995-96 Performance Levels for Transfer Courses 55

Table 30b: Successful Transfer Course Completion Rates for CCCCD Compared with Average Such Rates of Bay 10, Multi-College Districts, and System 55

Overview of Transfer Education

Historical, Policy, and Institutional Context

The educational route that allows students to advance from K-12 to the California Community Colleges and from this system to four-year institutions is often referred to as the "**transfer pipeline**". A central mission of American Community Colleges has been to provide this latter bridge through "**transfer education**", specifically, by providing students the lower-division coursework required for a baccalaureate degree which, when successfully completed, allows them to transfer to the upper-division programs of four-year postsecondary educational institutions (Cohen and Brawer, 1996). The process by which the merit of this lower-division coursework is established for the student's use in transferring to another institution is generally referred to as "**articulation**". This mission of community colleges is frequently referred to as the "**transfer function**". In California, this mission is formalized in the state's 1960 Master Plan for Public Higher Education and it has been reaffirmed in subsequent legislation and education code.

To further support this transition, various state agencies and public interest groups over the years have moved to hold the University of California (UC) and the California State University (CSU) system accountable for establishing a 40 to 60 ratio of lower to upper division students as called for by the Master Plan and to require that community college transfers be given the highest priority in the admissions process. Relatedly, the California Postsecondary Education Commission (CPEC) and the Intersegmental Coordinating Council (ICC) have helped to standardize the transfer requirements of UC and CSU. The State has funded numerous projects and the segments have developed many on their own without State support - all aimed at strengthening the transfer function. (For a more detailed accounting of these programs see Knoell, 1990; Ratliff and Woolfork, 1996; Laurente and Woolfork, 2001.) With these activities, the responsibility for upgrading the transfer function has shifted from a particular segment or program to intersegmental bodies. These changes have brought a richer policy perspective and helped to increase the likelihood that substantial progress would be made in this area.

Senate Bill 121 (Chapter 1188, Statutes of 1991) codified many of these foregoing efforts and the recommendations developed by the Legislature's Joint Committee on Review of the Master Plan in its 1988 report regarding desirable improvements in the operation of the transfer function. Some of the major provisions of SB 121 called upon UC, CSU, and California Community College (CCC) system to ensure the vitality of the transfer function by undertaking various courses of action, including:

1. The creation of a common core of general education courses to increase transfer prospects from the community colleges to the universities.

2. Implementation of a formal systemwide articulation and transfer agreement program by CCC, CSU, and UC. Relatedly, CSU/UC campuses were directed in both university systems to sign articulation agreements with community colleges for each of their undergraduate programs that have lower-division pre-requisites, and community colleges to sign discipline-specific transfer agreements with as many university campuses and majors as possible.

3. Provision by the Board of Governors of the California Community Colleges, community college districts, and individual community colleges of sufficient services (transfer centers, special counseling, program and administrative coordination, etc.) in order to "affirmatively seek out, counsel, advise, and monitor the progress of potential and identified community college transfer students".

4. Maintenance of a ratio of 40 percent lower-division students to 60 percent upper-division students by CSU, and the establishment of a similar ratio by UC by the 1995-96 academic year.

While not mandating transfer as the single most important function of the public segments of higher education systems, SB 121 did reaffirm three long-standing policy positions: (1) that "a viable and effective student transfer system is one of the fundamental underpinnings of public postsecondary education in California;" (2) that the "primary role" of the community colleges is "to prepare students for upper division access to the California State University and the University of California;" and (3) that community college students transferring to the universities should receive "high priority for admission," and have "high priority access to majors of choice" (Laurente and Woolfork, 2001).

Each community college, of course, supports the transfer function through a unique array of transfer education and related student service programs consistent with its mission priorities. The viability of the transfer function throughout the California Community College system is essential for insuring that students, who did not go directly to a four-year institution upon completion of high school, have the opportunity to do so if they so chose. The majority of students transferring from the CCC system are from lower socio-economic backgrounds. The California Community Colleges are strategically positioned to provide this and all other student populations with continued access to educational opportunities and to ensure that the characteristics of students served by public postsecondary institutions reflect the demographics of the state. The viability of the transfer function at California Community Colleges is thus an essential component of society's efforts to ensure equal educational opportunities for its citizens.

Students

Many students elected not to attend a four-year institution immediately after high school for various reasons, including: more convenient course schedules and greater opportunities to explore career options at community colleges; lack of resources; competing job requirements; the need to stay close to their families which they help support; impersonal and poorly timed outreach services of four-year institutions; trying low socio-economic conditions; competing family/community views and values; poor academic training/counseling resulting in minor/major skill deficits in one or more subject areas and low sense of self-efficacy; inadequate organizational, study, and critical thinking skills; unavailability of required courses; recentness of immigration from another country with limited English proficiency; a career focus that developed after high school. For these students, access to the California Community Colleges provides them with the opportunity and/or a more convenient route to pursue their higher education goals. Many of these students will ultimately transfer to a four-year institution.

What is a transfer student... As a student works to obtain transfer eligibility status, he or she must consider the transfer requirements of the targeted institution. These requirements have changed considerably over the years and these changes have frequently been the source of much confusion and grief. Laurente and Woolfork (2001) recently summarized the most current transfer requirements of UC, CSU, and other four-year postsecondary institutions as follows:

> **California State University?** For the California State University (CSU), any student who has completed college units after the summer immediately following graduation from high school is considered a transfer student. "Lower Division" transfer students at the State University are those students who have completed 55 or fewer transferable semester college units (83 or fewer quarter units). "Upper Division" transfer students are students who have completed 56 or more transferable semester college units (84 or more quarter units). The State University provides admission priority to all eligible community college upper division transfer students as is required by State statute.
>
> The **requirements for lower-division** transfer students to be admitted to the State University include:
>
> 1. A college grade point average of 2.00 or better in all transferable college units completed.
> 2. Good standing at the last college or university attended, academically, administratively.
> 3. Meet the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies they had in high school if they did not complete the 15-unit pattern of college preparatory subjects.
> 4. Meet the CSU "eligibility index" (ratio of GPA to ACT/SAT test scores) required of a freshman.
>
> The **requirements for upper-division** transfer students to be admitted to the State University include:
>
> 1. College grade point average of 2.00 or better (2.40 for California nonresidents) in all transferable college units completed.
> 2. Good standing at the last college or university attended, academically, administratively, etc.
> 3. Have completed or will complete prior to transfer at least 30 semester units (45 quarter units) or courses equivalent to general education requirements with a grade of C or better. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking) and at least one course of at least 3 semester units (4 quarter units) required in college-level mathematics.

Some CSU campuses have "impacted" programs - these are major programs for which more applications are received in the initial filing period from CSU eligible applicants than can be accommodated by the campus. Many CSU campuses have impacted majors and apply additional admission criteria for prospective transfer students. Several programs may be impacted at one or more, but not all, CSU campuses offering the program.

... at the University of California? The University of California (UC) uses a systemwide definition of a transfer student to allow individual campuses to determine who is a bona fide community college student for purposes of admissions priority. The University gives first priority to entering community college transfer students (over native matriculating students) in course selection.

The University of California's Final University-wide Definition of a California Community College Student for Admissions' Review Purposes reads as follows:

> A California community college student applying for admission to the University of California in advanced standing will be given priority admission over all other applicants if:
>
> 1. The student was enrolled at one or more California community colleges for at least two terms (excluding summer sessions);
> 2. The last college the student attended before admission to a UC campus was a California community college (excluding summer sessions); and
> 3. The student has completed at least 30 semester (45 quarter) UC transferable units at one or more California community colleges.

... at Independent Institutions? Nearly all of California's regionally accredited independent colleges and universities belong to a voluntary organization called the Association of Independent California Colleges and Universities (AICCU). While transfer requirements at the independents vary by institution, the AICCU publishes a *Transfer Handbook* each year to assist prospective community college transfer students. This document presents a variety of transfer information for AICCU member institutions, including: enrollment statistics, deadlines and deliverables, admissions requirements, and other information specific to transfer students.

Transfer students, who are described above, should not to be confused with first-time college students who are admitted to colleges and universities with advanced standing. These are generally students enrolled directly out of high school who are awarded college credit for coursework taken while in high school. High school programs that can lead to advanced standing status include: advanced placement courses, honors courses, and summer session collegiate courses.

The Transfer Process

The process by which college students who are enrolled at one postsecondary education institution prepare to continue their education at another is frequently called the "**transfer process**" (Laurente and Woolfork, 2001). This process, which varies with targeted transfer institution, can be bewildering for community college students. Laurente and

Woolfork (2001) provide the following outline below of the general sequence of events and steps that community college students typically follow in order to transfer successfully.

1. **Campus path**: Students first select the community college ("sending" institution) they wish to attend, often incorporating factors related to their eventual transfer into this decision [i.e., the relation this college may have with the targeted institution]. The student then may decide upon a baccalaureate degree granting ("receiving") institution and program of study, become knowledgeable about the many different requirements for transfers at that institution, and plan a course of study accordingly. Even knowing which receiving institution and academic program a student wishes to attend is not enough to ensure a successful transfer. Community college students need to research the specific requirements of their intended major and campus and the community college courses that are approved to meet these requirements. Prospective transfer students should seek guidance counseling and advice early in their educational career in order to carefully and successfully plan their transfer coursework.

2. **Coursework**: Community college students may increase their chances for admission and success after transferring if they develop and follow a pre-transfer plan of course work. The courses students take at community colleges, at a minimum, should help them meet the general education requirements for transfers to the receiving institution they plan on attending. In addition, students are advised to select community college courses that partially or completely fulfill a variety of other requirements of their prospective receiving institution. Knowing the requirements, and planning accordingly, maximizes students' chances for admission to their first-choice campus and program. Meeting transfer requirements in advance also gives students more freedom when selecting courses once they enroll in the receiving institution and increases their chances to complete their undergraduate education within four years.

Competitive Grade Point Average (GPA): The most important part of the transfer process is for the community college student to successfully complete the course of study at the college and then apply for transfer to the institution and/or major of their choice. Often just as important as course completion is a student's GPA in transferable courses. While community college students are generally eligible to transfer with a minimum GPA of 2.0 to 2.4, most competitive majors actually require a much higher GPA for admission. For example, in transfer information provided on its website, the University of California reports that in 1999 the average GPA of all transfer students admitted to the University was 3.3.

Table 1 expands on this point. It shows the recommended GPAs for community college transfer students planning to enroll in selected academic programs of study at all 8 UC general campuses for Fall 2001. It also describes the availability of those programs (that is, whether they are accepting new enrollments) and information specific to each UC campus on various aspects of the transferability of prior coursework.

Table 1
UC Transfer Advisement Tool for Counselors

Campus[1]	Transfer GPAs[2]	Impacted / Selected or Highly Competitive Majors[3]	Exceptions with Use of IGETC[4]	Allow units to be completed during summer before fall transfer?	Accepting applications for Winter 2002 / Spring 2002	General Information
Berkeley	Middle 50% of admits are 3.5 - 3.9[5]	• All majors in L & S are competitive • Engineering (All Majors) • Business – 3.3 min. • Architecture • Biological Science	• Architecture (College of Environmental Design) • Engineering • Business • College of Chemistry • Natural Resources	NO, except for: • College of Natural Resources	NO winter session. Accept Fall applications ONLY. Deferment to SPRING possible	• High GPA • Complete GE • Complete pre-major • 60 units required
Davis	2.8	• Division of Biological Science (All Majors) • Engineering (All Majors) • Computer Science • Psychology • International Relations Exercize Science • Fermentation Science • Viticulture & Enology	• Biological Science • Engineering • Majors that have high lower division requirement	NO, for courses to meet minimum eligibility or for impacted majors. YES, for IGETC and units	NO. Done by appeal directly to campus only	• TAA offers guarantee • Consult ASSIST for articulation in major prep.
Irvine	2.4	• Biological Sciences 3.0 • Economics • Chemistry 2.8 • Engineering (All) 3.2 • Info. & Computer Science • Math • Physics • Applied Ecology 2.8	NONE	NO, for courses to meet minimum eligibility or for impacted majors. YES, for IGETC and units	Not Dance or I.C.S. Music / Drama Winter 2002 YES Spring 2002 NO	• Complete English and Math early • Plan for a Fall transfer if possible. • Maintain a high GPA • Apply for PAIF
Los Angeles	3.2	• Economics • Economics/Business • Communication • Engineering (All Majors) • MPTV • Biology • World Arts and Cultures	• Engineering	YES, except unlikely for Math and English or major course work	YES, Winter 2002 only, but limited. Not all majors open (i.e. Schools of the Arts, Film, & Engineering, and Communication majors)	• Complete English and Math at application time • Do major requirements for ALL majors
Riverside	2.4	• Bus. Administration 2.5 • Engineering • Biological Sciences 2.7 • Biochem. & Chemistry 2.7 • All Majors in the College of Natural Agricultural Sciences[6] 2.7	• College of Natural & Agricultural Science • College of Engineering	YES	Winter and Spring 2002 YES, except engineering majors , Chem, Biochem, Bio Sciences (closed for Spring 2002)	• Major prep. highly recommended for Business Admin., Engineering (all majors), Bio, Biochem, Chem
Santa Barbara	2.7	• Engineering (All Majors) • Computer Science • College of Creative Studies • Biological Sciences	• Engineering (accepts IGETC, but completion of major preparation first is critical) • Former UC matric can't use IGETC	NO, for courses to meet minimum eligibility or for impacted majors. Priority given when requirements are done by Spring. YES, for IGETC and units	Winter 2002 YES, 60 or more units required. Spring 2002 NO	• English & Math should be completed or in process at time of application • For Winter admission, must be complete in Summer
Santa Cruz	2.4 and up	• Psychology • Environmental Studies • Art Minors: • Creative Writing • Production	• Not recommended for majors with extensive lower division preparation	NO, for courses to meet minimum eligibility or for impacted majors. YES for IGETC; 7 units max.	Winter 2002 YES Spring 2002 NO	• Will accept Scholars Program guarantee • Will not accept students with 90+ semester units if combined 4yr/2yr schools
San Diego	2.8	• Biological Science • Engineering, but not screened at time of application	• Roosevelt & Revelle College	NO	NO, unless a TAG student	• Complete min. UC Admissions requirement by Spring • TAG offers guarantee

1. Most UC campuses do not accept lower division transfer students; Most UC campuses consider Fall Term grades in making admission decisions.
2. These are recommended GPA levels for UC Colleges of Letters & Sciences, based on Fall '01 data; this information does not apply to all majors.
3. These programs require significant major preparation coursework and a higher GPA.
4. Most UC campuses do not recommend for students to follow IGETC who are planning to major in fields with significant lower division coursework. Please refer to IGETC Advisement for UC-Bound Transfers for more information.
5. Students with "extenuating circumstances" will be considered with lower GPA. "Extenuating circumstances" can be low income, first generation in college, or re-entry.
6. All majors in this college require the completion of 3 core sequences. C.S. and CSM: Engineering are screening.

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by Dan Nannini, Transfer Center Coordinator, Santa Monica College, 2001.

BEST COPY AVAILABLE

As this information shows, successful community college transfers into the University of California system have very high GPAs. They also must abide by fairly strict procedures on applications, course transferability, and other processes that not only differ by campus, but are also unique to specific departments within an individual UC campus. This information represents a single snapshot in time, but is generally reflective of the highly selective nature of the process of admitting and enrolling transfer students into the University of California system.

Evidence shows that the higher the GPA of the transfer student, the greater the likelihood that they will be accepted into their program of choice. This is particularly evident for those transfer students who have been admitted into highly competitive programs. The picture is not as clear for those transfer students with GPAs high enough to be fully eligible for transfer, though not as high as shown on the matrix. For these prospective transfer students, actual opportunities to transfer are more limited than is generally understood. This matrix, coupled with anecdotal information from those involved in the process, expands the view into the highly complex and competitive road that transfer students must navigate. At the same time, it may provide a map for policy makers of areas of potential roadblocks and bottlenecks in need of focused intervention.

3. **Timelines**: Receiving institutions have varying timelines for admission, and some impacted or highly competitive majors have even more stringent time-lines. Prospective transfer students should plan their applications with both community college and receiving institution counselors well in advance of their anticipated transfer.

Transfer Programs and Services

Concerns about the vitality of the transfer function have helped to bring into existence an array of transfer programs and services. Since the mid-1980's, several intersegmental initiatives to improve the transfer process have been established by the Governor and Legislature. Laurente and Woolfork (2001) have identified the various programs these initiatives have given rise to, including:

1. **Disabled Students Programs and Services (DSPS, 1980s) and Extended Opportunity Programs and Services (FOPS, 1980s)**: These two multi-purpose programs provide community college students with special challenges and disadvantages the additional services needed to enable their success. The goals of these programs include facilitating student transfer when that is a goal of the student in the program.

2. **The Articulation System Stimulating Interinstitutional Transfer Project (Project ASSIST, 1985)**: ASSIST is a computerized articulation and transfer planning system for the public sector jointly supported by each of the three public higher education systems.

3. **The California Articulation Numbering (CAN, 1985*)***: The CAN system assigns common numbers to courses that are deemed to be comparable between systems.

4. **Community College Transfer Centers (1985)**: Transfer Centers provide intersegmentally consistent assistance to potential transfer students and advises and counsels them through their community college education and helps in their preparation to transfer.

5. **Matriculation (The Seymour-Campbell Matriculation Act AB 3, Chapter 1467, Statutes of 1986)**: Matriculation is a statewide effort to improve student success in the community colleges by helping students determine appropriate educational goals, including transfer.

6. **The PUENTE Project (1986)**: This is a UC program designed to increase the number of Latino students transferring from community colleges. The project trains English teachers and Latino counselors as teams to conduct one-year writing, counseling, and mentoring pro-grams on community college campuses.

7. **The Intersegmental General Education Transfer Curriculum (IGETC, 1992)**: This program - often referred to as the "core transfer curriculum" - is a general education program that community college students may use to fulfill all of their lower-division general education requirements for either the CSU or UC while enrolled at the community college.

8. **The Intersegmental Major Preparation Articulated Curriculum (IMPAC, 1999):** This initiative is designed to get faculty to work together to develop a common understanding of major preparation requirements around the state.

Three of these initiatives -IMPAC, CAN, and ASSIST - merit more focused attention as they effectively summarize the spectrum of administrative activities designed and administered by the higher education systems to improve the operation of the transfer process.

IMPAC is an effort supervised by the Intersegmental Council of Academic Senates (ICAS) to get faculty to work together to develop a common understanding of major preparation requirements around the state. That is, history professors in one system - and sometimes even on the same campus - have varying ideas of what competencies are expected and what practices are appropriate to teach courses in their major, in order to facilitate articulation efforts. IMPAC is one of many efforts to get CSU and UC faculty, respectively, to agree on these basic premises so that faculty in the system will have consistent standards to use to develop actual articulation agreements with other higher education systems. IMPAC was created in the 1999-2000 budget and is funded through contract funds allocated through the community colleges.

CAN was created to promote the transfer of CCC students to UC/CSU institutions by simplifying the identification of transferable CCC courses and indicating the specific disciplines and programs for the UC/CSU institutions to which those course are transferable. CAN works to promote the development of a common method of course identification within each segment. CAN is funded by the state, through the CSU and the community colleges. The CAN Board is made up of representatives from each of the public postsecondary segments and includes campus representatives. The board oversees development and establishes policy for CAN. The daily implementation and project operations are managed by the CAN System Office at CSU Sacramento.

Specifically CAN is designed as a cross-reference course identification for a common core of lower-division, transferable, major preparation courses commonly taught on CCC, CSU, and UC campuses. This system eliminates the need for every single campus in the state to separately articulate their entire curriculum with every other campus in order to provide necessary information about major preparation for transfers. CAN facilitates transfer by establishing the academic integrity of a course and then insuring its transfer to a CAN participating institution. Not every public postsecondary institution participates in CAN. The UC has historically not been an advocate of CAN, therefore, most UC campuses do not participate in CAN.

ASSIST is a computerized student-transfer information system that displays reports of how course credits earned at one California college or university can be applied when transferred to another. ASSIST is California's official repository of articulation for California's colleges and universities and, therefore, provides the most accurate and up-to-date in-formation available to facilitate student transfer. ASSIST is funded by the state, through the 3 systems. The ASSIST Board of Directors is made up of CCC, CSU, UC campus faculty, staff and system representatives. The board oversees development and establishes policy for ASSIST. The ASSIST Coordination Site, located in Irvine, manages the daily implementation and project operations.

ASSIST's mission is to facilitate the transfer of California Community College students to California's public 4-year universities by providing an electronic system for academic planning, which delivers accurate, timely, and complete information and operates as the official repository of articulation information for the state of California. ASSIST's vision is to enhance student transfer by becoming more student-centered, to be better maintained as the official repository of California articulation information and to provide universal online access to articulation.

IMPAC and CAN are optional activities and do not cover all of the academic disciplines where courses are articulated. Traditional articulation processes of faculty review are used for courses not included in IMPAC and CAN before the results are entered into ASSIST. While IMPAC, CAN, and ASSIST all include representatives from the systems, the governance structures of CAN and ASSIST are formalized and include campus, systemwide and state policy makers on their respective boards.

It helps to look at IMPAC, CAN and ASSIST as a continuum. IMPAC would come first in that it is faculty working together to develop the basis for the articulation of courses. CAN would come second as the forum in which colleges and universities come together to actually develop, amend and standardize how courses are articulated. ASSIST is the final stage in this process in displaying and marketing the final, official articulation information. Thus, transfer and articulation information is negotiated through IMPAC, is made systematic via CAN, and is displayed and up-dated in ASSIST for students and CCC college counselors to use to advise students.

Policy Initiatives on Transfer

The Governor and Legislature recently adopted two major policy initiatives designed to direct State resources towards improving student transfer: (1) a memorandum of understanding between the CCC, CSU, UC, and AICCU to increase transfers; and (2) a specially funded California Community Colleges initiative—Partnership for Excellence—which cites transfer and transfer readiness as two of its six goals. Components of these two initiatives are summarized in **Table 2**.

Table 2

CPEC Agenda Document: Action Item 9

	CCC and CSU	CCC and UC	CCC and AICCU
Original Transfer Goals *(Partnership for Excellence)*.	An increase from 48,688 to 64,200 in the number of transfers to CSU	An increase from 10,886 to 14,500 in the number of transfers to UC.	An increase from 10,000 to 13,800 in the number of transfers to independent and out-of-state colleges.
Original dates and timelines.	Signed on May 3, 2000; effective 2000-01 through June 30, 2003.	Signed in November 1997, revised in May 2000; effective 1995-96 (base year) through 2005-06.	Signed in March, 2000; effective 2001-02 through 2005-06.
Revised Transfer Goals (adopted by the CCC Board of Governors in July 2000).	CCC will increase, by 5 percent each year, the number of upper-division CCC students fully qualified to transfer to CSU; CSU will enroll all fully qualified CCC students seeking admission to CSU. Note: Base-year change to 1998-99.	CCC will increase the number of transfer-ready students to provide enough applicants to increase by at least 5 percent annually the number of transfer students eligible to enroll at UC.	
Revised time-lines	Base-year change from 1995-96 to 1998-99. Goal-year remains at 2005-06.	Base-year change from 1995-96 to 1998-99. Goal-year remains at 2005-06.	
New Sub-Goal: Transfer-Prepared (adopted by the CCC Board of Governors in December 1999).	An increase in the number of California Community College students who are Transfer-Prepared from 106,951 in 1997-98 to 135,935 in 2005-06. *"Transfer-Prepared" is defined as the number of students systemwide who earned, within a six-ear period, 56 transferable units with a minimum GPA of 2.0.*		

Source: Office of District Research, Contra Costa CCD. Adapted from Laurente and Workfork, **Agenda document, Action Item 9,** California Postsecondary Education Commission 2001.

BEST COPY AVAILABLE

Challenges to a Successful Transfer Process

In their recent evaluation of the transfer function, Laurente and Woolfork (2001) outline the challenges to the State in this area as follows:

> The Commission has described ... that the transfer function involves the integration of a complex array of programs, services, and institutional relationships that are not solely the responsibility of the community colleges nor of the receiving institutions. Admissions requirements and practices, academic major and general education requirements, course articulation, information dissemination, faculty interaction, program availability, and actual institutional behaviors all affect the success of the transfer function. Shortcomings in any one of these components lessen the functionality of the whole transfer system.
>
> In addition, the varied missions of the State's public higher education systems complicate the intersegmental coordination of student transfer efforts. That many CSU and UC campuses have highly sought-after, "impacted" programs in which enrollment is limited also makes consistently successful transfer a greater challenge. Another major unknown in the transfer equation is what happens to students who are transfer-eligible but who leave the community colleges and do not transfer to a CSU, UC, or independent institution. Anecdotal information and limited research point in many directions for these students - out-of-state schools, proprietary institutions, full-time employment, or other personal objectives.
>
> As noted earlier, the Commission's many analyses of the transfer function all point to the need for more cohesive and coherent information on transfer students - from the time they enter a community college until the time they graduate from a baccalaureate degree-granting institution. The following are suggested activities that should be undertaken as part of this effort:
>
> 1. Thorough evaluations of the progress of California's higher education systems with regard to the commitments made in the various Memorandums of Understanding developed to improve the transfer of community college students.
> 2. Research and evaluate issues of transfer "supply" and "demand," in order to establish reasonable parameters for State transfer expectations.
> 3. Examination of the many segment-specific and intersegmental transfer programs and initiatives currently in force to assure that they are functioning in a coordinated, effective and cost-effective manner.
> 4. Sponsored forums and workshops for transfer programs directors and staff to facilitate information exchanges, develop methods for increased coordination of activities, reduce current redundancies in some transfer efforts, and garner greater commitments to State goals from all stakeholders.
> 5. National research on intersegmental student transfer in other states highlighting successful practices elsewhere.

6. Research projects on transfer-related issues to submit as grant proposals to educational research foundations in order to acquire external funding to help leverage State resources dedicated to improving student transfer in California.

7. Collection and dissemination to colleges, universities and policymakers of comprehensive information on the progress of community college transfer students in California.

8. Greater in-depth analysis of data related to student transfer and report on areas in need of improvement and components of the process that are functioning well. This should include research with students and faculty to determine current practices that both enhance and hinder successful student transfer.

9. Extensive case studies on transfer, as the Commission did in its 1996 transfer report, and in-depth program evaluations of transfer initiatives, similar to the one conducted by the Commission in 1996 on ASSIST. These case studies should focus on both the transfer experiences of individual students and on transfer in the context of local institutions. The goal of this examination is to determine "best practices" that can be replicated at institutions in other regions of the State or statewide.

In sum, the transfer goals of the California Master Plan of Higher Education will likely be realized only when greater attention is given to the coordination of transfer programs and when a more systematic approach to the evaluation of transfer initiatives is taken. Moving in this direction will improve the efficiency and effectiveness of the transfer function and accordingly facilitate the transfer students from California Community Colleges to four-year institutions.

Transfer Education and the California Community College System

This section provides a statewide overview of the flow of transfers from the California Community College System (CCC) to CSU, UC, and AICCU member institutions. Where possible their upper-division performances are profiled.

Transfer Access

As can be seen in **Table 3**, most transfers to CSU and UC come from CCC. In 1999-00, for example, 83% and 74% of transfers to CSU and UC, respectively, came from CCC. The numbers of transfers from CCC to CSU show a 4.7% increase since 1997-98 following a three-year decline, whereas, the total from CCC to UC has been decreasing up to 1999-00 which showed a 6.6% increase over the prior year. For both CSU and UC, transfers from other California institutions have been decreasing while those from out of state have been increasing, especially at UC which has seen a 39.6% increase of these latter transfer students over their 1993-94 total. This finding is not surprising given the low costs of public higher education in California relative to the costs elsewhere for public and private postsecondary institutions.

Tables 4-5 show the particular CSU and UC campuses to which CCC students transferred. The top five campuses for 1999-00, in terms of their CCC transfer totals, at CSU were Fullerton, Sacramento, Northridge, Long Beach, and San Diego. At UC, the top five campuses sought by CCC transfers in1990-00 were Los Angeles, Berkeley, Davis, Santa Barbara, and San Diego.

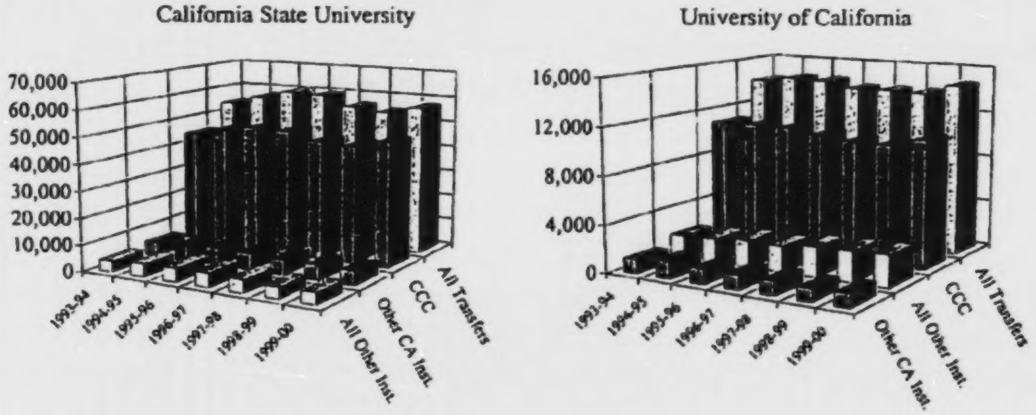
With the decline in the total number of transfers to CSU and UC for the 95-98 period, there has been a corresponding decline in the number of minority transfers. As displayed in **Tables 6-7,** for 1999-00, there was a small increase over the prior year at CSU in Black, Filipino, and Latino but not Asian and Native American transfers. At UC, all ethnic minority transfers show a similar decline and slight increase for 1999-00 over 98-99 with the exception of Native Americans.

Whereas transfer totals declined for UC and CSU for the 95-98 interval, they actually increased by 8.7% for California Independent Colleges and Universities. **Tables 8-9** show this increase and the top five private institutions that received the most CCC transfers for the 90-99 period. Specifically, these were National University, University of Southern California, University of San Francisco, Chapman University, and Point Loma Nazarene University.

As can be seen in **Tables 10-11**, there was a three-year downward trend for admitted totals, with the percent of **admitted** 98-99 CCC transfers to both CSU and UC showing a decline of 14.4% and 3.6% respectively over 96-97 levels. However, the percent of CCC transfers that **enrolled** in these systems during this time increased by 7.5% for CSU and 2.9% for UC, with increases observed for all ethnic groups as well. While the percent of admitted CCC transfers increased slightly from 1998-99 to 1999-00 at both CSU and UC, the percent of their enrolled transfers decreased somewhat, with Black and Latino transfers showing increases in their absolute totals at both CSU and UC.

Table 3

Origins of New Undergraduate Transfer Students to the California State University and the University of California, Full-Year 1993-94 to 1999-00


California State University

University of California

	California State University				University of California			
Full Year	All New Transfer Students	California Community Colleges	Other California Institutions	All Other Institutions	All New Transfer Students	California Community Colleges	Other California Institutions	All Other Institutions
1993-94	54,189	44,454	5,474	4,261	14,073	10,930	1,218	1,925
1994-95	57,339	46,912	5,675	4,752	14,462	10,915	1,501	2,046
1995-96	60,153	48,688	6,399	5,066	14,381	10,879	1,257	2,245
1996-97	59,783	48,349	6,192	5,242	13,880	10,479	1,227	2,174
1997-98	56,082	45,546	5,665	4,871	13,909	10,193	1,187	2,529
1998-99	54,601	44,989	5,394	4,218	13,831	10,150	1,079	2,602
1999-00	57,401	47,706	5,312	4,383	14,655	10,821	1,147	2,687

Definition of Measure:	Number of transfer students enrolling during the academic year by institution of origin type, as reported by the California State University and the University of California to the Commission.
Use(s) of Measure:	This measure describes changes in the number and origin of new students entering beyond the first-time freshman level.
Related Measures:	Measure IV. E. describes the racial/ethnic composition of community college transfers and IV.F. describes the pattern of applicants, admits and enrollments of these transfers.
Comparison Group:	Differences in representation of transfer students from different source institutions over the last six years relates to major Master Plan and legislated transfer policies.
Analysis:	1999 saw an increase in the number of students transferring from the California Community Colleges to the State's public universities after a three-year decline at the State University and a five-year decline at the Univerity. Transfers of students from other California institutions continued to decline at the State University while transfers from all other institutions increased slightly. At the University, transfers from other California institutions were up slightly from 1998 but down overall since 1993. Transfers to the University from all other institutions increased slighly from 1998 and has increased 39.6 percent since 1993.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure D,** California Postsecondary Education Commission.

Table 4

New Community College Transfer Students at the California State University, by Campus, 1997-98 to 1999-00

Campus	1997-98	1998-99	1999-00
CSU Bakersfield	783	821	958
CSU Chico	2,111	1,992	2,045
CSU Dominguez	1,499	1,335	1,665
CSU Fresno	2,184	1,991	2,203
CSU Fullerton	3,518	4,126	4,318
CSU Hayward	2,056	1,869	1,901
Humboldt State	971	923	983
CSU Long Beach	3,148	3,264	3,789
CSU Los Angeles	2,230	1,939	2,024
Maritime Academy	42	46	31
CSU Monterey Bay	310	434	451
CSU Northridge	3,388	3,388	3,915
Cal Poly Pomona	2,003	1,977	2,004
CSU Sacramento	3,573	3,664	3,929
San Diego State	4,322	3,746	3,666
San Francisco State	3,138	3,508	3,499
San Jose State	3,714	3,681	3,555
Cal Poly San Luis	1,342	1,248	1,386
CSU San Marcos	1,074	1,282	1,287
Sonoma State	1,059	1,033	1,057
CSU Stanislaus	1,157	1,007	1,140
Total	**45,456**	**44,989**	**47,706**

Source: Office of District Research, Contra Costa CCD. Adapted from **Factsheet 01/02,** California Postsecondary Education Commission, January 2001.

Table 5

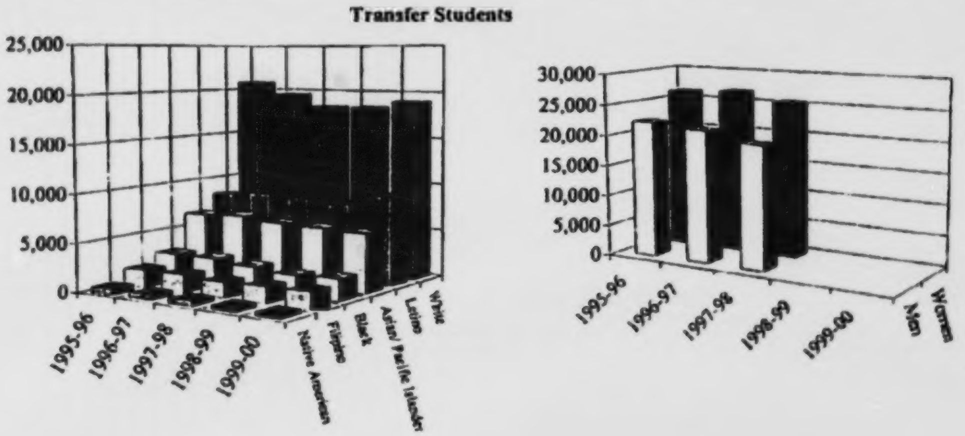
New Community College Transfer Students at the University of California, by Campus, 1997-98 to 1999-00

Campus	1997-98	1998-99	1999-00
Berkeley	1,721	1,652	1,682
Davis	1,394	1,371	1,461
Irvine	820	827	877
Los Angeles	2,066	2,054	2,434
Riverside	814	799	851
San Diego	1,186	1,108	1,253
Santa Barbara	1,203	1,459	1,368
Santa Cruz	1,006	891	901
Total	**10,210**	**10,161**	**10,827**

Source: Office of District Research, Contra Costa CCD. Adapted from **Factsheet 01/02,** California Postsecondary Education Commission, January 2001.

Table 6

Full-Year Community College Transfers by Racial/Ethnic Group and Gender to the California State University, 1995-96 to 1999-00


Transfer Students

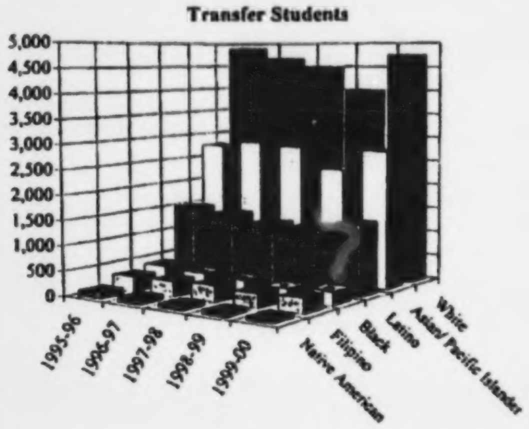
Full Year	Total Transfer Students	Asian/ Pacific Islander	Black	Filipino	Latino	Native American	White	Total, Declared Ethnicity	Ethnicity Unknown	Men	Women
1995-96	48,688	6,562	2,836	1,840	8,334	641	20,931	41,144	5,973	22,246	26,442
1996-97	48,349	6,741	2,799	1,867	8,661	604	19,623	40,295	6,551	21,525	26,824
1997-98	45,546	6,346	2,442	1,626	8,464	565	18,341	37,784	6,287	19,955	25,591
1998-99	44,989	6,230	2,105	1,711	8,201	475	18,375	37,097	7,892		
1999-00	47,706	6,056	2,261	1,776	9,296	442	19,064	38,895	8,849		

Definition of Measure:	Number of new community college transfer students for the academic year, by racial/ethnic group, as reported by the State University to the Commission.
Use(s) of Measure:	This measure describes the racial/ethnic composition of the pool of new community college transfers to the State University over the full academic year.
Related Measures:	Measure IV.E.2. describes the University's community college transfer pool while Measure IV.F.1. describes the applicant, admit, and enrollment pattern for these transfers.
Comparison Group:	Full-year transfer data over the last five years by racial/ethnic group provides an indicator of the relative impact of transfer on baccalaureate opportunities for different groups of students.
Analysis:	The total number of community college transfers to the State University increased in 1999-00 by 6.0 percent from 1998-99 figures, marking the end of a three-year decline. Significant increases in Latino transfer students (+1,095), transfer students from unknown racial-ethnic backgrounds (+957) and White transfer students (+689) comprised almost all of the increase, with slight increases in Black transfer students (+156) and Filipino transfer students (+65). Native American transfer students decreased by 33 from 1998-99 to 1999-00. Among all racial-ethnic groups, only Latinos have recovered, even surpassed, numerical highs achieved in prior years.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure E.1,** California Postsecondary Education Commission.

Table 7

Full-Year Community College Transfers by Racial/Ethnic Group and Gender to the University of California, 1995-96 to 1999-00



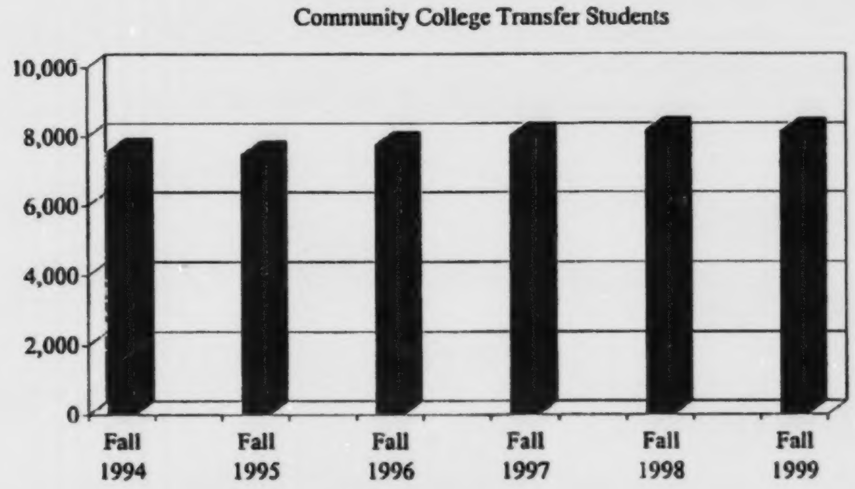
Full Year	Total Transfer Students	Asian/ Pacific Islander	Black	Filipino	Latino	Native American	White	Total, Declared Ethnicity	Ethnicity Unknown	Men	Women
1995-96	10,879	2,767	386	310	1,503	137	4,888	9,991	888	Not Currently Available	
1996-97	10,479	2,863	333	318	1,430	124	4,664	9,732	747		
1997-98	10,193	2,806	293	340	1,300	102	4,487	9,328	865		
1998-99	10,150	2,377	228	296	1,302	97	4,000	8,300	1,861		
1999-00	10,821	2,800	272	314	1,432	92	4,763	9,673	1,154		

Definition of Measure:	Number of new community college transfer students for the academic year, by racial/ethnic group, as reported by the State University to the Commission.
Use(s) of Measure:	This measure describes the racial/ethnic composition of the pool of new community college transfers to the State University over the full academic year.
Related Measures:	Measure IV.E.1. describes the State University's community college transfer pool while Measure IV.F.2. describes the applicant, admit, and enrollment pattern for these transfers.
Comparison Group:	Full-year transfer data over the last five years by racial/ethnic group provides an indicator of the relative impact of transfer on baccalaureate opportunities for different groups of students.
Analysis:	The total number of California community college transfers to the University increased in 1999-00 by 6.6 from 1998-99 marking the end of a five-year decline. All racial-ethnic groups saw one-year increases except Native Americans and students of unknown racial-ethnic backgrounds. Despite the one-year increases, Black, Latino and Native American transfer students have not yet recovered their numerical highs of prior years. White transfer students have nearly regained their former numerical standing. Asians, Filipinos and transfer students of unknown racial-ethnic backgrounds have increased in overall numbers since 1995-96.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure E.2,** California Postsecondary Education Commission.

Table 8

Community College Transfers Enrolling at Fifty California Independent Colleges and Universities, Fall 1994 to Fall 1999



	Fall 1994	Fall 1995	Fall 1996	Fall 1997	Fall 1998	Fall 1999
Community College Transfer Students	7,589	7,495	7,783	8,045	8,176	8,144

Definition of Measure:	Number of new community college transfer students for the academic year, as reported by California independent colleges and universities.
Use(s) of Measure:	This measure describes the number of new community college transfers to independent colleges and universities in the fall semester.
Related Measures:	Measure IV.E.1 and E.2. describe the public universities' community college transfer pools while Measure IV.F.3 describes the applicant, admit, and enrollment pattern for these transfers.
Comparison Group:	These transfer data over the last six years provide some indication of shifts in the transfer objectives among some community college students seeking baccalaureate opportunities.
Analysis:	The number of California Community College students transferring to fifty independent colleges and universities increased by 7 percent over the past five years. **Note:** Recent CPEC efforts have been made to collect longitudinal data from all 65 independent colleges and universities that enroll community college transfer students. Data from fifty institutions are reported here.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure E.3,** California Postsecondary Education Commission.

Table 9

California Community College Transfer Students to Fifty-Seven (57) AICCU Institutions, 1990-1999

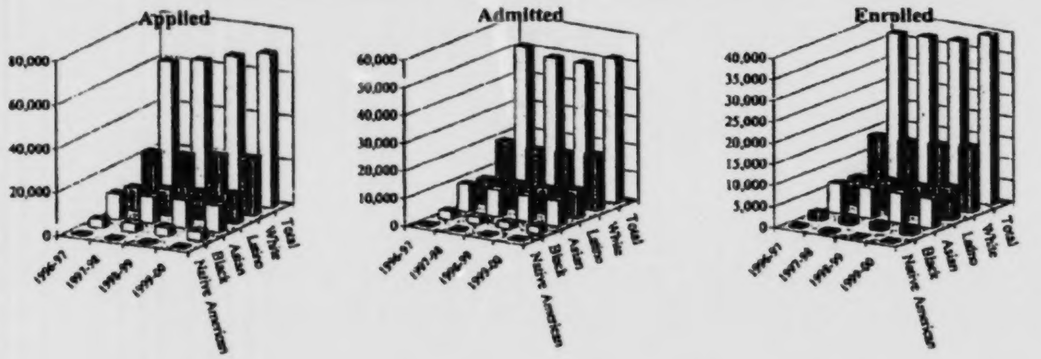
Name of the Institution	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	[illegible]
1 Art Center College of Design	86	88	81	65	74	63	41	60	97	86	0%
2 Azusa Pacific University	181	181	168	159	149	138	119	107	133	169	-7%
3 Biola University	53	54	44	77	82	97	80	54	89	78	47%
4 California Baptist University	45	45	84	77	71	65	80	83	137	79	76%
5 California College of Arts & Crafts	76	76	76	76	58	68	68	57	96	59	-22%
6 California Institute of the Arts	49	55	61	67	73	45	58	60	65	55	12%
7 California Institute of Technology	1	1	1	1	2	3	5	2	1	4	300%
8 California Lutheran University	99	114	83	160	132	120	40	110	102	153	55%
9 Chapman University	240	240	240	252	290	319	294	230	215	265	10%
10 Claremont McKenna College	2	9	8	11	18	7	4	3	9	7	250%
11 Cogswell Polytechnical College	25	26	27	28	19	22	50	47	38	46	84%
12 College of Notre Dame	76	69	101	104	120	70	121	109	127	114	50%
13 Concordia University	31	33	35	52	58	54	39	49	52	55	77%
14 Dominican University of California	68	77	114	117	89	102	81	89	88	131	93%
15 Fresno Pacific University	40	41	81	58	55	55	45	57	57	92	130%
16 Golden Gate University	88	112	350	152	150	150	132	114	84	98	10%
17 Harvey Mudd College	2	3	2	2	1	2	1	2	3	4	100%
18 Holy Names College	13	13	19	23	31	29	26	12	29	34	162%
19 Hope International University	18	19	19	19	19	19	17	57	55	37	95%
20 Humphreys College	31	76	76	75	74	74	73	30	38	98	216%
21 John F. Kennedy University	35	43	46	54	54	65	55	33	38	50	43%
22 La Sierra University	67	67	94	85	76	67	92	116	102	88	31%
23 Loma Linda University	70	78	274	350	252	195	140	225	249	197	181%
24 Loyola Marymount University	225	225	225	242	232	108	200	256	179	212	-6%
25 Marymount College	70	70	70	49	27	40	14	18	18	40	-43%
26 Master's College, The	61	61	61	61	60	61	29	48	67	67	10%
27 Menlo College	27	46	55	64	41	35	33	33	38	53	96%
28 Mills College	37	67	50	99	94	32	76	73	74	55	49%
29 Mount St. Mary's College	88	48	133	144	128	142	102	81	57	69	-22%
30 National University*	2408	2127	2360	2123	2342	2328	2803	3097	3149	3190	32%
31 Occidental College	19	19	7	43	28	29	24	25	38	36	89%
32 Otis College of Art & Design	73	73	73	73	73	73	88	82	104	78	7%
33 Patten College	12	12	8	18	34	62	27	25	23	23	92%
34 Pepperdine University	108	102	81	88	125	116	97	85	68	69	-36%
35 Pitzer College	13	12	11	6	6	1	4	9	7	4	-69%
36 Point Loma Nazarene University	201	252	333	264	222	253	206	190	224	196	-2%
37 Pomona College	3	3	3	5	6	5	4	5	3	1	-67%
38 Saint Mary's College of California	132	123	130	141	140	92	119	92	113	136	3%
39 Samuel Merritt College	26	27	26	126	36	96	62	27	18	18	-31%
40 San Francisco Art Institute	52	52	65	55	62	57	50	42	35	79	52%
41 San Francisco Conservatory of Music	8	8	8	8	8	2	2	1	3	3	-63%
42 Santa Clara University	109	109	163	181	154	141	127	113	101	98	-10%
43 Scripps College	11	9	2	11	10	2	5	4	9	2	-82%
44 Simpson College	42	37	37	31	33	77	46	38	38	38	-10%
45 Stanford University	11	15	18	29	25	20	26	13	11	5	-55%
46 United States International University	36	9	13	19	22	35	31	8	23	23	-36%
47 University of La Verne	69	69	69	83	81	106	116	81	81	107	55%
48 University of Redlands	33	39	50	59	60	78	76	65	49	72	118%
49 University of San Diego	156	156	123	164	172	172	138	141	125	162	4%
50 University of San Francisco	154	154	184	533	434	200	305	334	171	298	92%
51 University of Southern California	845	877	845	1009	880	845	848	858	872	845	0%
52 University of the Pacific	226	271	367	330	194	175	138	171	168	158	-30%
53 University of West Los Angeles	22	22	11	15	18	18	11	19	11	11	-50%
54 Vanguard Univ. of Southern California	59	25	50	78	81	78	74	68	83	75	27%
55 Westmont College	53	44	70	62	40	53	46	47	54	39	-26%
56 Whittier College	16	19	12	51	42	70	62	49	75	44	175%
57 Woodbury University	84	85	80	87	73	69	67	96	118	139	65%
Grand Total	6887	6773	7888	8413	7906	7526	7673	7950	8080	8442	23%

Please note: While AICCU had 65 institutions that enrolled undergraduate in 1999, four institutions (Art Institute of Southern California, Charles R. Drew University of Medicine & Science, New College of California, University of Judaism) were not members during the entire period from 1990-1999; three institutions (American Academy of Dramatic Arts West, Pacific Oaks College, Pacific Union College) did not provide data for all of the years indicated, and one institution (Thomas Aquinas College) does not accept transfer credits.
Sources: CPEC's annual fall survey "Source of CCC Transfer Students." AICCU's Fall Admissions Survey, 1990 to 1999.
*Data are imputed for missing years. *For National University, data reflects full-year data.*

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California Postsecondary Education Commission.

Table 10

Disposition of Unduplicated Applications for Admission by Racial/Ethnic Group for Upper Division CCC Transfer Students at the California State University, 1996-97 to 1999-00



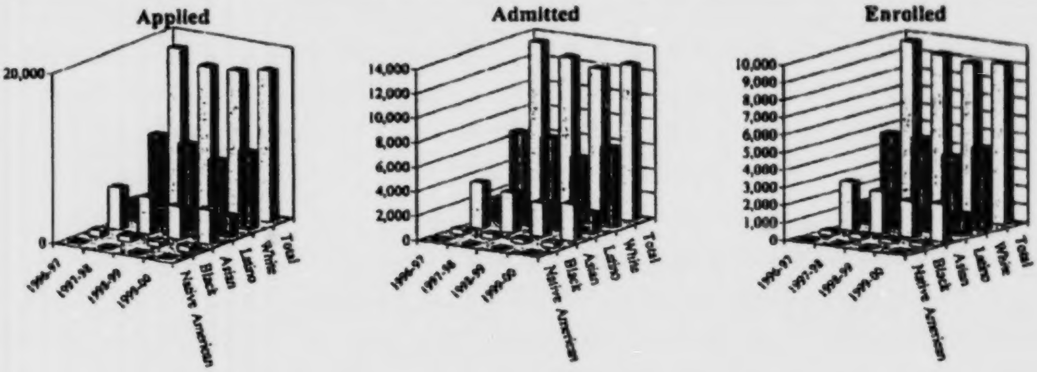
		Asian		Black		Latino		Native American		White		Total	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1996-97	**Applied**	11,667		3,865		10,711		764		22,973		60,793	
	Admitted	9,924	85.1	2,952	76.4	9,049	84.5	626	81.9	20,079	87.4	51,498	84.7
	Enrolled	6,910	69.6	2,068	70.1	6,581	72.7	453	72.4	14,651	73.0	36,884	71.6
1997-98	**Applied**	12,055		3,767		11,788		824		23,474		63,232	
	Admitted	9,386	77.9	2,526	67.1	9,238	78.4	568	68.9	18,866	80.4	49,115	77.7
	Enrolled	6,894	73.4	1,883	74.5	7,053	76.3	435	76.6	14,551	77.1	37,269	75.9
1998-99	**Applied**	12,481		3,745		12,393		725		25,466		67,192	
	Admitted	8,975	71.9	2,252	60.1	9,108	73.5	514	70.9	19,173	75.3	48,695	72.5
	Enrolled	6,942	77.3	1,675	74.4	6,866	75.4	395	76.8	14,924	77.8	37,519	77.0
1999-00	**Applied**	12,148		3,995		13,463		670		26,412		70,403	
	Admitted	8,970	73.8	2,494	62.4	10,189	75.7	482	71.9	20,296	76.8	52,291	74.3
	Enrolled	6,868	76.6	1,842	73.9	7,792	76.5	365	75.7	15,617	76.9	39,973	76.4

Definition of Measure:	The number of unduplicated applicants, those admitted and those enrolling as new Upper Division community college transfer students at the California State University, as reported by the CSU Division of Analytical Studies. The applied and admitted categories count multiple applications to CSU campuses only once. Ethnic group counts do not include non-resident aliens.
Use(s) of Measure:	This measure describes the disposition of applications for freshmen enrollment at the University and provides some sense of changes in enrollment demand.
Related Measures:	Measures IV.A. and IV.B. provide statewide context. Measure IV.C.2. shows these data for the University of California.
Comparison Group:	Application numbers broadly define student interest and the source population, while the number admitted may indicate changes in qualifications of applicants, and enrollment numbers define admitted applicants' final choice.
Analysis:	Total community college transfer applicants grew by 4.8 percent in 1999-00. Increases among Latino (+1,070) and White (+946) transfer students contributed to this growth. Acceptance rates dropped significantly from 1996-97 levels across all racial-ethnic groups. Conversely, enrollment rates for all groups has increased over the five-year period and resulted in a one-year increase in 1999-00 of 2,454 enrollees (an increase of 6.5 percent).

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure F.1,** California Postsecondary Education Commission.

Table 11

Disposition of Unduplicated Applications for Admission by Racial/Ethnic Group for Transfer Students at the University of California, 1996-97 to 1999-00



		Asian		Black		Latino		Native American		White		Total	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1996-97	**Applied**	4,841		771		2,540		233		9,221		18,470	
	Admitted	3,703	76.5	455	59.0	1,829	72.0	159	68.2	6,738	73.1	13,494	73.1
	Enrolled	2,733	73.8	300	65.9	1,294	70.7	113	71.1	4,838	71.8	9,725	72.1
1997-98	**Applied**	4,275		637		2,203		180		8,820		17,021	
	Admitted	3,231	75.6	398	62.5	1,628	73.9	126	70.0	6,580	74.6	12,631	74.2
	Enrolled	2,389	73.9	287	72.1	1,176	72.2	91	72.2	4,761	72.4	9,206	72.9
1998-99	**Applied**	3,739		559		2,215		183		7,465		17,122	
	Admitted	2,724	72.9	312	55.8	1,562	70.5	122	66.7	5,370	71.9	12,076	70.5
	Enrolled	2,055	75.4	219	70.2	1,132	72.5	88	72.1	3,994	74.4	8,959	74.2
1999-00	**Applied**	3,949		596		2,402		176		9,071		17,758	
	Admitted	2,955	74.8	358	60.1	1,699	70.7	111	63.1	6,517	71.8	12,739	71.7
	Enrolled	2,119	71.7	245	68.4	1,215	71.5	81	73.0	4,684	71.9	9,139	71.7

Definition of Measure:	The number of applicants, those admitted and those enrolling as new community college transfer students at the University of California, as reported by the University.
Use(s) of Measure:	This measure describes the disposition of applications for enrollment as transfers at the University and provides some sense of changes in enrollment demand.
Related Measures:	Measures IV.D. provide statewide context. Measure IV.F.1. presents the State University data.
Comparison Group:	Application numbers broadly define student interest and the source population, while the number admitted may indicate changes in qualifications of applicants, and enrollment numbers define admitted applicants' final choice.
Analysis:	Despite a recent increase, the number of community college transfer applicants to the University has steadily decreased since 1996-97 with the decrease distributed across all racial-ethnic groups. Acceptance rates decreased for all groups except Blacks whose rate rose only slightly (1.1 percentage points). Enrollment rates for Blacks, Latinos and Native Americans increased over the three-year period, while those for Asians and Whites declined.

Source: Adapted from Higher Education Performance Indicators, 2000, Figure F.2, **California Postsecondary Education Commission.**

Noteworthy is the finding that for the 1999-00 academic year, 12,318 or 23.5% of admitted CCC transfers to CSU and 3,600 or 28.3% of admitted CCC transfers to UC did not enroll. It is not possible to state exactly what these statistics mean. Certainly some transfers may have been admitted to both systems, but clearly the number of no shows at CSU could not have all enrolled at UC. Most certainly, a substantial number of CCC transfers are going to other institutions in- and out-of-state. Additional research is needed to determine where and how many so that these transfers can get considered in the evaluation of Partnership for Excellence goals of CCC.

Transfer Outcomes

As is apparent in **Tables 12-15**, the graduation and persistence rates of upper-division "Regularly Admitted" CCC transfers enrolling at CSU and UC Fall 1994 have increased over the performance of those entering Fall 1990 and compare favorably with those of Native Freshmen cohorts. Indeed, these rates for CCC transfers were 22.7% and 2.0% greater than those for their CSU and UC Native Freshmen counterparts. For CCC lower-division transfers to these systems that were "Admitted by Exception," these rates compare favorably with those of Native Freshmen who were similarly admitted, although these rates were not as high as those for Regularly Admitted transfers. The performance rates for these CCC transfers were 19.6% and 4.5% greater than those for their native cohorts at CSU and UC. Similar differences held for CCC transfers with disabilities and their counterparts, with the rates for the former being 13.8% and 7.2% greater than those for the latter at CSU and UC. The one-year persistence rates for the lower-division CCC transfers Admitted by Exception has decline slightly at both CSU and UC over 1993 levels but still compares favorably with those of their native counterparts.

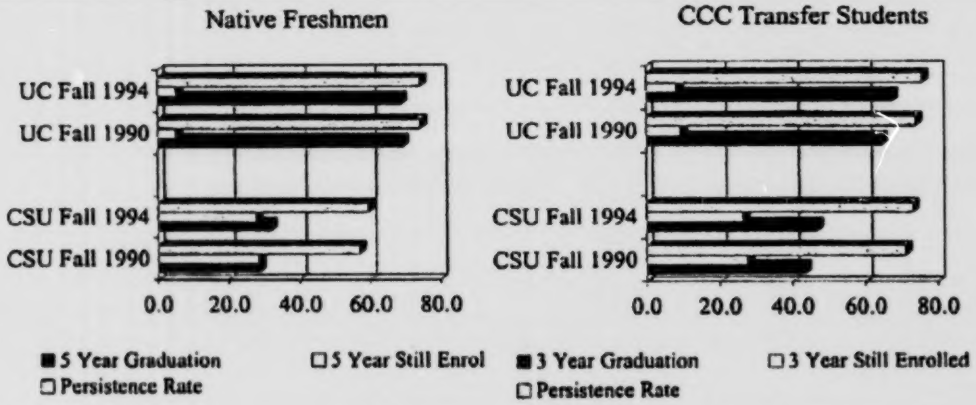
Table 16 shows the persistence, graduation, and time-to-degree rates for CCC transfers to UC that were Regularly Admitted and Admitted by Exception. This table provides more detail than do Tables 12-15. The rates shown appear slightly less than what was reported by CPEC in these latter tables. This may reflect differences in the times at which the data were evaluated and in the criteria used to identify students as CCC transfers. Most important to note here is the time-to-degree statistics which suggest that CCC transfers take between take 2.4 to 2.9 years to get their degree, with Regularly Admitted transfers getting their degree in shorter time than their Admitted by Exception cohorts.

Tables 17-18 show the 58.6% and 29.8% increase in the number of certificates and degrees awarded by CCC over 1993-94 levels. The largest percent of these awards are for professional, life science, and liberal arts areas. These graduates are, of course, potential transfer candidates. Historically, it was held that CCC students would first get their degree and then transfer to four-year institutions. This view is no longer current as CCC students most often transfer without a degree once they have achieved the minimum total of transferable units required. Indeed, CSU and UC are now allowing CCC students to transfer and complete their 1-2 remaining course requirements on their campus. While award data may help gauge how well CCC is meeting its general education mission, they may no longer be a valid proxy measure of how well CCC is supporting the transfer function.

These outcome data strongly suggest that CCC transfers are well prepared to compete academically at CSU and UC, that their level of preparation and number will very likely continue to improve, and that those who transfer as upper-division students tend to perform better than those who with lower-division status.

Table 12

Five-Year Persistence Rates of Freshmen and Three-Year Rates for Upper Division Community College Transfer Students Regularly Admitted at California's Public Universities, Fall 1990 and Fall 1994



Native Freshmen	California State University Fall 1990	California State University Fall 1994	University of California Fall 1990	University of California Fall 1994
5 Year Graduation	28.5	31.8	69.2	68.8
5 Year Persistence	28.5	27.7	5.2	5.4
Graduation & Persistence Rate	57.0	59.5	74.4	74.2

Upper Division Community College Transfers	California State University Fall 1990	California State University Fall 1994	University of California Fall 1990	University of California Fall 1994
3 Year Graduation	43.2	46.5	64.3	67.2
3 Year Persistence	27.7	26.5	9.5	8.4
Graduation & Persistence Rate	70.9	73.0	73.8	75.6

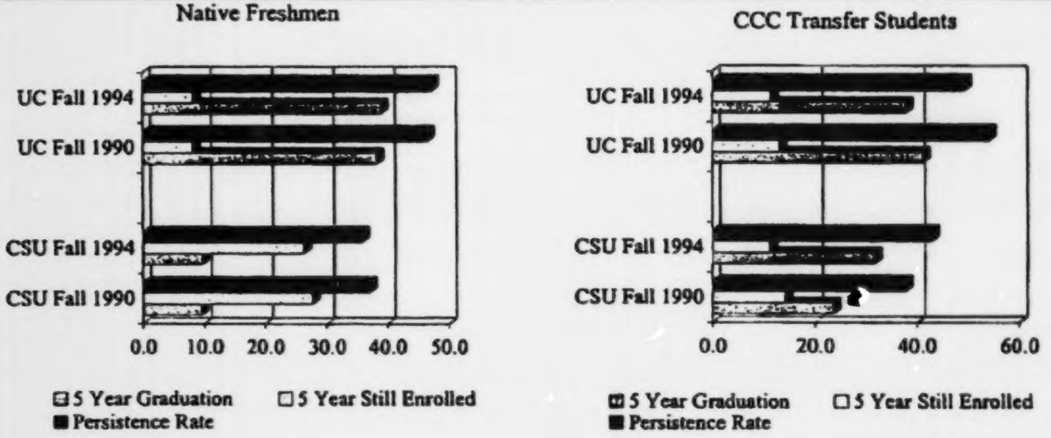
Definition of Measure:	Percentage of regularly admitted freshmen who graduated or continued within five years at any CSU campus (rather than campus of origin only). Percentage of UPPER DIVISION community college transfers who graduated or continued within THREE years at any CSU campus (rather than campus of origin only). The CSU is using upper division community college transfers; therefore, THREE-year rates are shown. Reported by the CSU Division of Analytic Studies. University data is reported by the UC Office of the President.
Use(s) of Measure:	This measure provides an indicator of the proportion of students who are continuing or completing their baccalaureate studies within the time periods specified.
Related Measures:	V.A.1.b. provides this data for specially admitted students. V.A.2.a. provides data on first year persistence rates for these students. Measures in V.D. provide data about degree completion.
Comparison Group:	Multi-year data show changes across time and student cohorts.
Analysis:	The five-year persistence and graduation rates of native freshmen were relatively unchanged at the State University and at the University. There was modest growth in the three-year graduation rates of "upper division" transfer students at both university systems. Overall graduation and persistence rates for transfer students surpass, by far, those of native freshmen at the State University have improved to slightly above those of native freshmen at the University.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure A.1.a,** California Postsecondary Education Commission.

BEST COPY AVAILABLE

Table 13

Five-Year Persistence Rates of Freshmen and Five-Year Rates for Lower Division Community College Transfer Students "Admitted by Exception" at California's Public Universities, 1990 and 1994



	California State University		University of California	
Native Freshmen	**Fall 1990**	**Fall 1994**	**Fall 1990**	**Fall 1994**
5 Year Graduation	9.5	9.6	38.2	38.9
5 Year Persistence	27.6	26.2	8.1	8.2
Graduation & Persistence Rate	37.1	35.8	46.3	47.1
Lower Division Community College Transfers	**Fall 1990**	**Fall 1994**	**Fall 1990**	**Fall 1994**
5 Year Graduation	23.5	31.6	41.0	37.8
5 Year Persistence	14.2	11.2	13.1	11.4
Graduation & Persistence Rate	37.7	42.8	54.1	49.2

Definition of Measure: Percentage of specially admitted freshmen who graduated or continued within five years at any CSU campus (rather than campus of origin only). Percentage of LOWER DIVISION community college transfers who graduated or continued within FIVE years at any CSU campus (rather than campus of origin only). The CSU is using lower division community college transfers; therefore, FIVE-year rates are shown. Reported by the CSU Division of Analytic Studies. University data is reported by the UC Office of the President.

Use(s) of Measure: This measure provides an indicator of the proportion of these students who continued or completed their baccalaureate studies within the time periods specified.

Related Measures: Measure V.A.1.a. provides data on regularly admitted students. Measure V.A.2.b. provides data on first year persistence rates for these students. Measures V.D. provides additional information about degree completion.

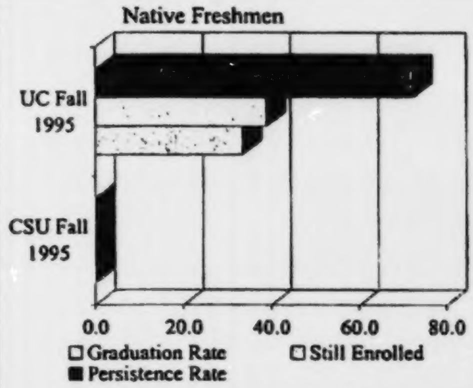
Comparison Group: Multi-year data show changes across time and student cohorts.

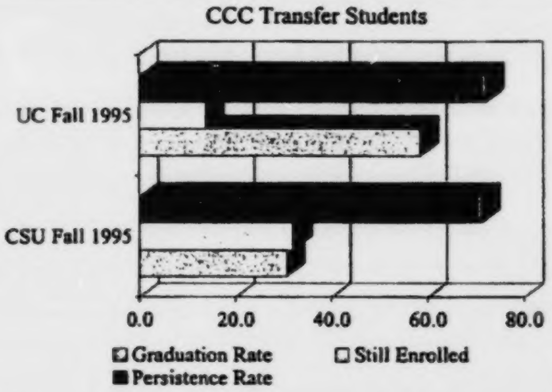
Analysis: Graduation and persistence rates of "special action" freshmen declined at the State University and improved slightly at the University. Growth in the five-year graduation rate contributed to improvement in the overall persistence of "specially admitted" lower division community college transfer students at the State University. Among "specially admitted" transfer students at the University, both the graduation rate the persistence rate declined.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure A.1.b,** California Postsecondary Education Commission.

Table 14

Four-Year Persistence Rates of Freshmen with Disabilities and Three-Year Rates for Upper Division Community College Transfer Students with Disabilities, Fall 1995 at the California State University and Fall 1994 at the University of California


Native Freshmen


CCC Transfer Students

California State University

Native Freshmen		Fall 1995
4-Year Graduation		5.8
4-Year Still Enrolled		56.7
Persistence Rate		62.5
Upper Division Community College Transfers	**Fall 1990**	**Fall 1995**
3-Year Graduation	30.5	38.8
3-Year Still Enrolled	31.9	32.3
Persistence Rate	71.1	71.1

University of California

	Fall 1993	Fall 1994
4-Year Graduation	33.4	26.4
4-Year Still Enrolled	38.9	36.3
Persistence Rate	72.3	62.7
	Fall 1993	**Fall 1994**
3-Year Graduation	58.4	58.6
3-Year Still Enrolled	13.7	8.6
Persistence Rate	72.1	67.2

Definition of Measure: Percentage of freshmen with disabilities who graduated or continued within FOUR years at any CSU campus (rather than campus of origin only) and upper division community college transfer students with disabilities who graduated or continued within THREE years at any CSU campus (rather than campus of origin only) as reported by the California State University Division of Analytic Studies. University data is reported by the UC Office of Student Academic Services.

Use(s) of Measure: This measure provides an indicator of the proportion of these students completing their baccalaureate studies within the time periods specified.

Related Measures: Measure V.A.1.a and 1.b. provide this information for regularly and specially admitted students.

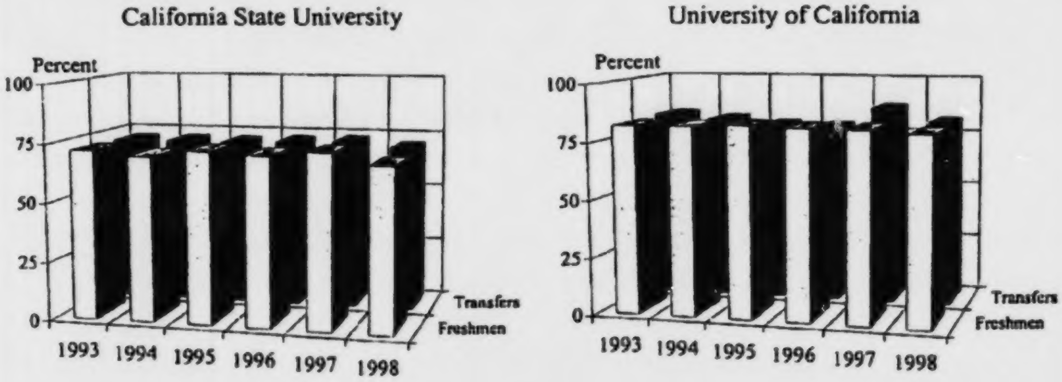
Comparison Group: Currently, the University of California continues to develop these for recent student cohorts.

Analysis: At the State University, persistence of native freshmen with disabilities remained constant but declined substantially at the University. Persistence of community college transfer students with disabilities declined at both university systems. Despite these recent fluctuations, the combined graduation and persistence rates in both university systems are very similar to the overall graduation and persistence rates of comparable cohorts of regularly admitted community college transfer students.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure A.1.c,** California Postsecondary Education Commission.

Table 15

One-Year Persistence Rates for First-time Freshmen and Lower Division Community College Transfer Students "Admitted by Exception," Fall 1993 To Fall 1998 Matriculants



	California State University						University of California					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
First-time Freshmen	71.9	69.7	72.4	71.3	73.4	68.8	82.1	82.1	82.9	82.2	82.2	80.9
Lower Division Community College Transfers	71.5	71.7	71.5	72.3	72.8	70.7	83.1	81.3	79.2	78.5	87.5	81.6

Definition of Measure:	Percentage of specially admitted first-time freshmen and lower division community college transfer students who were enrolled one year after matriculation, as reported by the systemwide offices. Column headings represent the matriculation year of each fall cohort.
Use(s) of Measure:	This measure describes changes in the first-year persistence of successive cohorts of entering specially admitted or admitted by exception students.
Related Measures:	Measures V.A. present five-year graduation and persistence data for these students.
Comparison Group:	This measure presents persistence data for the most recent five-year period reported by the systems.
Analysis:	Among first-time freshmen admitted by exception, first-year persistence declined sharply at the State University and declined as well, though more modestly, at the Unversity. Community college transfer students had the opposite experience. Their first-year persistence rate dropped sharply at the University while the decline at the State University was more moderate.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure A.2.b,** California Postsecondary Education Commission.

Table 16

Persistence, Graduation, and Time-to-Degree
Upper Division California Community College Transfers to UC, *Regularly Admitted*

Entering Transfers		Persistence Rates		Graduation Rates*			Average Time-to-Degree	
Fall	**Number**	**1-year**	**2-year**	**2-year**	**3-year**	**4-year**	**Calendar Years**	**Quarters Enrolled**
1988	3,541	87.5%	49.6%	29.6%	61.3%	74.5%	2.5	7.9
1989	3,704	88.6%	48.7%	23.7%	62.1%	74.7%	2.5	7.9
1990	5,063	89.4%	47.5%	25.8%	64.3%	76.6%	2.5	7.7
1991	5,201	89.5%	43.5%	28.8%	65.6%	76.8%	2.4	7.6
1992	6,127	91.2%	42.7%	30.8%	68.4%	78.7%	2.4	7.5
1993	6,754	90.4%	44.0%	30.2%	68.0%	79.1%		
1994	7,014	90.5%	44.9%	29.4%	67.2%	77.8%		
1995	7,353	91.2%	45.2%	29.4%				
1996	7,294	90.5%	44.2%					
1997	7,042	90.7%	42.4%					
1998	7,047	92.0%						

Persistence, Graduation, and Time-to-Degree
Upper Division California Community College Transfers to UC, *Admitted by Exception*

Entering Transfers		Persistence Rates		Graduation Rates*			Average Time-to-Degree	
Fall	**Number**	**1-year**	**2-year**	**2-year**	**3-year**	**4-year**	**Calendar Years**	**Quarters Enrolled**
1988	291	80.1%	53.3%	12.4%	39.9%	54.6%	2.9	8.6
1989	307	80.5%	47.2%	10.4%	40.1%	53.1%	2.9	8.5
1990	283	82.7%	54.6%	10.2%	41.0%	57.6%	2.8	8.4
1991	246	83.7%	54.1%	10.6%	39.4%	54.9%	2.8	8.6
1992	204	83.3%	56.9%	10.3%	39.2%	60.3%	2.8	8.6
1993	248	83.1%	52.4%	12.1%	41.5%	56.9%		
1994	193	81.3%	48.2%	10.9%	37.8%	49.2%		
1995	159	79.2%	41.5%	15.7%				
1996	144	78.5%	47.2%					
1997	104	87.5%	55.8%					
1998	174	81.6%						

Persistence, Graduation, and Time-to-Degree
Upper Division California Community College Transfers to UC, *All Students*

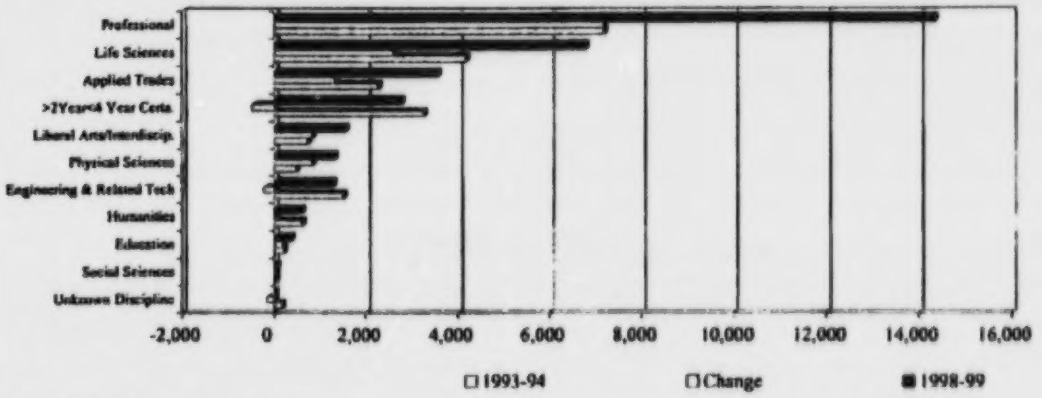
Entering Transfers		Persistence Rates		Graduation Rates*			Average Time-to-Degree	
Fall	**Number**	**1-year**	**2-year**	**2-year**	**3-year**	**4-year**	**Calendar Years**	**Quarters Enrolled**
1988	3,832	87.0%	49.9%	28.3%	59.7%	73.0%	2.6	7.9
1989	4,011	87.9%	48.5%	22.7%	60.4%	73.0%	2.6	7.9
1990	5,346	89.0%	47.9%	25.0%	63.1%	75.6%	2.5	7.8
1991	5,447	89.2%	44.0%	28.0%	64.4%	75.8%	2.5	7.8
1992	6,331	91.0%	43.2%	30.1%	67.5%	78.1%	2.4	7.5
1993	7,002	90.2%	44.3%	29.6%	67.1%	78.3%		
1994	7,207	90.3%	45.0%	28.9%	66.4%	77.1%		
1995	7,512	91.0%	45.1%	29.1%				
1996	7,438	90.3%	44.2%					
1997	7,146	90.7%	42.6%					
1998	7,221	91.8%						

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by UC Systemwide Office.

BEST COPY AVAILABLE

Table 17

Pre-Baccalaureate Certificates Awarded at the California Community Colleges by Discipline, 1993-94 to 1998-99, with Change Between 1993-94 and 1998-99



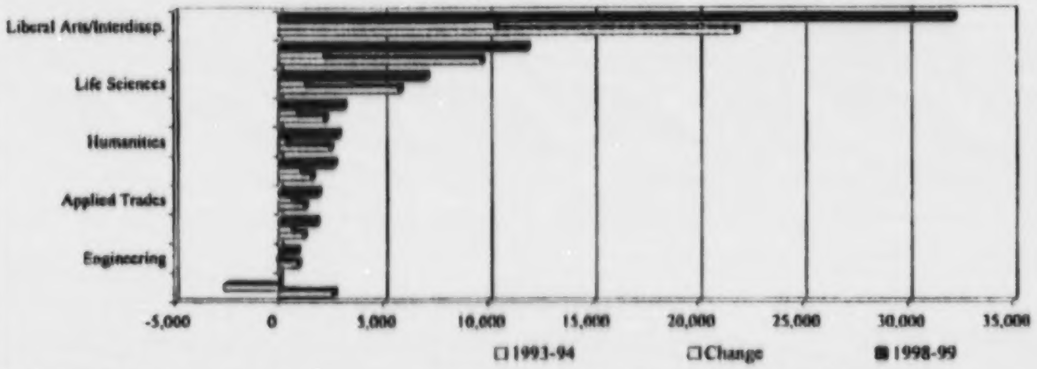
Pre-Baccalaureate Certificates by							Change from	
Major Discipline Areas	**1993-94**	**1994-95**	**1995-96**	**1996-97**	**1997-98**	**1998-99**	**93-94**	**to 98-99**
Education	193	130	127	153	239	358	165	85.5 %
Engineering & Related T	1,482	894	849	811	1,516	1,263	-219	-14.8 %
Humanities	585	351	368	428	485	575	-10	-1.7 %
Life Sciences	4,168	3,907	4,533	4,986	6,024	6,760	2,592	62.2 %
Physical Sciences	469	590	716	731	944	1,289	820	174.8 %
Professional	7,169	8,566	9,519	10,665	13,554	14,325	7,156	99.8 %
Social Sciences	20	34	23	24	24	37	17	85.0 %
Liberal Arts/Interdiscip.	709	349	522	470	1,187	1,523	814	114.8 %
Applied Trades	2,256	2,707	3,205	3,462	3,373	3,552	1,296	57.4 %
Unknown Discipline	159	72	175	177	285	0	-159	-100.0 %
>2Year<4 Year Certs.	3,244	3,611	2,485	3,662	3,178	2,762	-482	-14.9 %
Total Pre-Bac. Certifica	20,454	21,211	22,522	25,569	30,809	32,444	11,990	58.6 %
Annual Change		3.7 %	6.2 %	13.5 %	20.5 %	5.3 %		

Definition of Measure:	Number of pre-baccalaureate certificates awarded by major discipline by the California Community Colleges, as reported to the Commission.
Use(s) of Measure:	This measure describes changes in the numbers of certificates awarded over the last six years reflecting changes in students' majors.
Related Measures:	Measure V.C.1. provides information on associate degrees awarded by the California Community Colleges and V.C.1 and C.2. present the same data on baccalaureate degrees.
Comparison Group:	The six-year span provides information on different student cohorts while the major discipline groups show trends within similar subject areas.
Analysis:	The number of pre-baccalaureate certificates awarded in 1998-99 was 59 percent greater than the number reported five years ago, with the numerical increases in all disciplines except Engineering (-219) and Humanities (-10). During the five-year period, the number of certificates of "greater than 2-year but less than 4-year " programs decreased by 15 percent.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure C.2,** California Postsecondary Education Commission.

Table 18

Associate Degrees Awarded at the California Community Colleges by Discipline, 1993-94 to 1998-99, with Change Between 1993-94 and 1998-99



Associate Degrees by Major Discipline Areas	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	Change from 93-94 to 98-99	
Education	1,174	1,136	1,021	1,368	1,492	1,798	624	53.2 %
Engineering	892	893	810	938	961	821	-71	-8.0 %
Humanities	2,445	2,593	2,243	2,712	2,727	2,800	355	14.5 %
Life Sciences	5,760	6,356	6,263	6,886	6,877	7,041	1,281	22.2 %
Physical Sciences	1,556	1,740	1,802	2,124	2,380	2,601	1,045	67.2 %
Professional	9,681	10,133	10,174	11,635	11,617	11,888	2,207	22.8 %
Social Sciences	2,196	2,324	2,258	2,572	2,808	3,076	880	40.1 %
Liberal Arts/Interdisep.	21,809	23,555	26,028	28,415	28,950	32,149	10,340	47.4 %
Applied Trades	1,222	1,453	1,585	1,795	1,704	1,872	650	53.2 %
Unknown Discipline	2,599	764	826	623	1,524	0	-2,599	-100.0 %
Total AA Degrees	49,334	50,947	53,010	59,068	61,040	64,046	14,712	29.8 %
Annual Change		3.3 %	4.0 %	11.4 %	3.3 %	4.9 %		

Definition of Measure: Number of associate degrees awarded by major discipline by the California Community Colleges, as reported to the Commission.

Use(s) of Measure: This measure describes changes in the numbers of associate degrees awarded over the last six years reflecting changes in students' majors.

Related Measures: V.C.2. provides information on pre-baccalaureate certificates awarded by the community colleges and V.D., E. and F. provide information about degrees at other levels.

Comparison Group: The six-year span provides information on two relatively different student cohorts while the major discipline groups show trends within similar subject areas.

Analysis: Associate degrees awarded by the community colleges increased by nearly 30 percent over their level five years ago. Only degrees in Engineering-related majors decreased over this period. The largest numerical increase occurred in Liberal Arts and Interdisciplinary degrees, while the largest percentage increase occurred in degrees awarded in the Applied Trades.

Source: Adapted from **Higher Education Performance Indicators, 2000, Figure C.1,** California Postsecondary Education Commission

Transfer Education, Assessment, and Mission at CCCCD

Outcome Assessment of Transfer Function

Over the last several years, CCCCD has moved to develop institutional effectiveness indicators to gauge its progress along key educational dimensions. Parts of CCCCD's Institutional Effectiveness 2000 Report regard the performance of students receiving transfer education and the progress of CCCCD in meeting its Partnership for Excellence (PFE) goals in this area. These evaluations build on data and analyses from the State Chancellor's Office that permit comparisons across select community college districts. Tables 19a-30b summarize these relevant findings for each indicator or PFE goal for to the extent possible.

Institutional Effectiveness Indicators

1. Student Goal Attainment: No data at this time.

   Assisting students in reaching their educational goals is one of the most important services a community college provides and one of the most difficult to track. Currently, the District's colleges can input data into its information system indicating that a student has one of the following educational objectives:

   Transfer Eligibility
   AA/AS Degree
   Certificate of Achievement
   Job Skills Development
   Improved Basic Skills
   Personal Development/Enrichment

   Although these data can be captured during the student's first semester, they are not regularly updated in subsequent semesters. Determining the validity of these data is a challenge as students frequently change their educational objectives once their college experience makes them aware of new career choices or talents they did not know they had. Many students, for example, state their goal as AA/AS degree because they think that is what they are supposed to say. In addition, some Financial Aid options require students to declare specific goals when the actual intent of the learner might be different. Students are continually reassessing their views and judgments as they learn more about themselves and society. These self-assessment and the dramatic changes that follow often invalidate first-semester educational objective data.

   College deans, planners, researchers, and faculty recognize the need to obtain valid measures of educational objectives. Renewed advising/counseling arrangements are helping to ensure that students will update their educational plans and objectives in view of their academic performance, college experiences, and new assessments. It is expected that by this time next year, measures of student attainment will be available.

2. Transfer Course Success Rates:

As can be seen in **Table 19a**, for 99-00, Contra Costa College, Diablo Valley College, and Los Medanos College all show an increase over 95-96 levels in the percent of students who successfully complete their transfer coursework (i.e., a grade of "c: or better). CCC's 7.3% increase for this is noteworthy.

The change in CCCCD's successful transfer course completion rates for this same period of time compare favorably with the average rates of other institutional benchmarks: the Bay Area's ten community college districts, multi-college community college districts in the state, and the California Community College system. If CCCCD is comparable to these institutions and is performing similarly in relevant areas, then CCCCD should yield comparable results. The findings displayed in **Table 19b** are consistent with this position and suggest a slightly higher performance level for CCCCD.

3. Transfer Statistics:

Number Identified as Having Transferred: The findings in **Table 20a** show the number of students from Contra Costa College (CCC), Diablo Valley College (DVC), and Los Medanos College (LMC) that transferred to CSU and UC for the 95-00 period. The yearly totals shown vary a good deal from their 95-96 levels, with the totals for 00-01 showing positive and negative changes over this baseline.

Simple percent changes of current totals over their 95-96 baselines, of course, do not tell the whole story. The data displayed clearly show that colleges with negative 95-00 changes had 2-3 instances within this period where their transfer totals exceeded their baseline levels, and they show that a college with a positive 95-00 percent change can have a year in its trend line which shows an even larger positive change or a negative one. For example, the record for 96-97 shows that CCC achieved a 31.2% increase in UC transfers and LMC had a 19.3% increase in CSU transfers even though their 95-00 percent changes was negative. CCC which showed a positive 13.5% change for 95-00 in CSU transfers had an even larger percent change of 24.4% for these transfers in 96-97. These achievements are worth noting. The reasons for the variations in transfer totals from year-to-year are potentially many and not always apparent.

The negative percentage changes of 14.6% and 44.4% in UC transfers for CCC and LMC, while appearing substantial, are based on relatively small numerical changes (differences of 7 and 12 respectively). It is worth noting that while transfer totals to UC for these two colleges were declining in the last two years, their transfer totals to AICCU member institutions were increasing; these totals were 33 and 35, respectively, for CCC and LMC (Tables 23-24c).

DVC showed a substantial 25.5% increase in UC transfers and a 18.4% decrease in CSU transfers over its 95-96 baselines. The reason for this latter outcome is not clear. It does not necessarily indicate, of course, that DVC was preparing less and less transfers. In this regard, it is interesting to note that 200 DVC students transferred to AICCU member institutions during the 99-01 period (Tables 23-24c), two years in which CSU and UC totals were decreasing. As more follow- up data becomes available, a more informed and balanced accounting of college efforts will be possible.

Table 19a

Successful Transfer Course Completion Rates

	1995-96	1996-97	1997-98	1998-99	1999-00	95-99
	% Successful	% Successful	% Successful	% Successful	% Successful	**% Change**
CCC	67.5	70.2	72.3	73.9	72.4	**7.3%**
DVC	71.0	70.1	70.2	71.9	72.0	**1.4%**
LMC	69.6	67.0	67.0	69.1	70.4	**1.2%**

Table 19b

Successful Transfer Course Completion Rates for CCCCD Compared with Average Such Rates of Bay 10, Multi-College* Districts, and System

	1995-96	1996-97	1997-98	1998-99	1999-00	95-99
	% Successful	% Successful	% Successful	% Successful	% Successful	**% Change**
CCCCD	70.2	69.6	70.1	71.8	71.8	**2.3%**
Bay 10	69.6	70.3	71.5	71.4	71.0	**2.0%**
Multi-College	68.1	67.7	68.3	68.7	68.3	**0.3%**
Systemwide	68.3	68.3	68.7	69.1	68.7	**0.6%**

*Los Angeles College District, which has nine colleges, has been excluded from the Multi-College analysis. Its funding and performance patterns tend to be atypical and its inclusion would invalidate comparative analysis. See Addendum 1 for specification of Bay 10 and Multi-College districts.

Source: Office of District Research, Contra Costa CCD. Based on **System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

As can be observed in **Tables 20a-20b**, CCCCD has increased the number of students it sends to UC by 18% over 1995-96 totals, whereas, Bay 10 institutions and multi-college districts increased their transfer totals by 2.7% or less over this same baseline. Los Rios CCD and CCCCD have the highest totals of UC transfers among multi-college districts.

The number of CCCCD transfers to **CSU**, on the other hand, has decrease by 13.3% for the 1995-01 period; the Bay 10 and other multi-districts have shown, respectively, declines of 14.7% and 3.5%. Los Rios, Coast, Foothill-DeAnza, the State Center, and CCCCD have been the top five among multi-college districts with respect to their CSU transfer totals. The reasons for the finding that Bay Area community colleges have experienced a decline in CSU transfers while others in the state have not are not apparent. The colleges are aware of the challenge posed by these declines. They have reconfigured their Transfer Center activities with instruction and student services to strengthen their support of transfer-bound students. PFE funds have helped to enhance and continue these initiatives.

As can be seen in **Tables 21a-22c,** the relative distribution of these transfers to CSU is similar to what was observed for CCC statewide. Specifically, for CSU, the top five campuses to which CCCCD students transfer tend go to Fullerton, Sacramento, Northridge, Long Beach, and San Francisco with San Diego a close sixth place. No comparable data were available for UC.

Table 22 shows transfer totals by ethnicity. As can be seen, a substantial percent of CCCCD transfers to UC and CSU are minority students: 77% of Contra Costa College transfers tend to be minority students and around 50% of these are Asian/Pacific Islanders and Black; about 44% of DVC transfers tend to be minority and around 33% of these are Asian/Pacific Islanders and Latino; and 46% of LMC transfers tend to be minority and around 30% are Black and Latino.

As is known, changes in the above transfer totals can reflect many factors, including: the increasing number of options for students to transfer to institutions other than UC and CSU; the growing number of popular majors that do not have openings at UC/CSU and that prevent CCCCD students from transferring to these institutions; the increasing number of attractive job opportunities; the relatively high housing costs in communities surrounding many UC/CSU campuses; and the impact of Proposition 209.

Table 23 summarizes the number of CCCCD transfers to private four-year post-secondary institutions from 1991-92 to 2000-01. It should be noted that these figures are limited to members of the Association of California Colleges and Universities who report these statistics to the California Postsecondary Education Commission.

As can be seen in **Tables 24a-24c**, 179 CCCCD students transferred to private postsecondary institutions Fall 2000; 40 or 22% of these were minority students. Saint Mary's College received the largest number of these students (47 or 26%) and six other institutions received five or more transfers: California College of Arts and Crafts, John F. Kennedy University, National University, Simpson College, and the University of San Francisco.

Table 20a

Number of Transfers to UC and CSU

	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	95-00
University of California	#	#	#	#	#	#	% Change
CCC	48	63	53	49	47	41	-14.6
DVC	436	453	435	470	489	547	25.5
LMC	27	22	31	22	29	15	-44.4
California State University	#	#	#	#	#	#	
CCC	193	240	202	188	211	219	13.5
DVC	1,296	1,106	1,027	1,033	1,076	1,057	-18.4
LMC	161	192	167	154	147	155	-3.7

Table 20b

Number of Transfers for CCCCD Compared with Average Number of Transfers for Bay 10 and Multi-College* Districts

	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	95-00
University of California	#	#	#	#	#	#	% Change
CCCCD	511	538	519	541	565	603	18.0
Bay 10	218	209	217	206	215	218	0.0
Multi-College	261	251	247	239	253	268	2.7
California State University	#	#	#	#	#	#	
CCCCD	1,650	1,538	1,396	1,375	1,434	1,431	-13.3
Bay 10	891	882	783	788	795	760	-14.7
Multi-College	1,204	1,214	1,132	1,107	1,157	1,162	-3.5

*Los Angeles College District, which has nine colleges, has been excluded from the Multi-College analysis. Its funding and performance patterns tend to be atypical and its inclusion would invalidate comparative analysis. See Addendum 1 for specification of Bay 10 and Multi-College districts.

Source: Office of District Research, Contra Costa CCD. Based on System Performance on Partnership for Excellence Goals, **Chancellor's Office, California Community Colleges, April 2001.**

Table 21a

Contra Costa College 1999-2000
The California State University Campus Destinations for Fall 1999
California Community College Transfers

	Contra Costa College			Systemwide Total		
Campus	**Lower Division**	**Upper Division**	**Total**	**Lower Division**	**Upper Division**	**Total**
Bakersfield	0	0	0	224	360	584
Chico	0	2	2	203	1,140	1,343
Dominguez Hills	0	0	0	83	967	1,050
Fresno	2	0	2	353	1,111	1,464
Fullerton	0	0	0	166	2,537	2,703
Hayward	11	38	49	301	756	1,056
Humboldt	0	2	2	124	586	710
Long Beach	0	1	1	365	2,222	2,587
Los Angeles	0	0	0	215	856	1,071
Maritime Academy	1	0	1	27	4	61
Monterey Bay	0	0	0	92	207	299
Northridge	0	0	0	181	2,325	2,506
Pomona	0	0	0	309	812	1,121
Sacramento	2	8	10	355	2,206	2,561
San Bernardino	0	0	0	264	923	1,187
San Diego	1	2	3	344	2,052	2,396
San Francisco	3	53	56	199	2,204	2,403
San Jose	2	6	8	238	2,084	2,322
San Luis Obispo	0	0	0	139	644	783
San Marcos	0	0	0	208	581	789
Sonoma	2	5	7	149	566	715
Stanislaus	0	3	3	194	561	755
Totals	**24**	**120**	**144**	**4,733**	**25,704**	**30,437**

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California State University, Systemwide Office, 2001.

Table 21b

Diablo Valley College 1999-2000
The California State University Campus Destinations for Fall 1999
California Community College Transfers

	Diablo Valley College			Systemwide Total		
Campus	**Lower Division**	**Upper Division**	**Total**	**Lower Division**	**Upper Division**	**Total**
Bakersfield	1	0	1	224	360	584
Chico	11	41	52	203	1,140	1,343
Dominguez Hills	0	0	0	83	967	1,050
Fresno	3	2	5	353	1,111	1,464
Fullerton	0	3	3	166	2,537	2,703
Hayward	24	138	162	301	756	1,056
Humboldt	5	10	15	124	586	710
Long Beach	5	8	13	365	2,222	2,587
Los Angeles	0	1	1	215	856	1,071
Maritime Academy	0	0	0	27	4	61
Monterey Bay	0	1	1	92	207	299
Northridge	0	2	2	181	2,325	2,506
Pomona	2	4	6	309	812	1,121
Sacramento	14	62	76	355	2,206	2,561
San Bernardino	0	0	0	264	923	1,187
San Diego	10	37	47	344	2,052	2,396
San Francisco	20	177	197	199	2,204	2,403
San Jose	13	38	51	238	2,084	2,322
San Luis Obispo	9	21	31	139	644	783
San Marcos	1	1	2	208	581	789
Sonoma	3	16	19	149	566	715
Stanislaus	3	1	4	194	561	755
Totals	**124**	**564**	**688**	**4,733**	**25,704**	**30,437**

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California State University, Systemwide Office, 2001.

Table 21c

Los Medanos College 1999-2000 The California State University Campus Destinations for Fall 1999 California Community College Transfers

	Los Medanos College			Systemwide Total		
Campus	**Lower Division**	**Upper Division**	**Total**	**Lower Division**	**Upper Division**	**Total**
Bakersfield	0	0	0	224	360	584
Chico	2	5	7	203	1,140	1,343
Dominguez Hills	0	0	0	83	967	1,050
Fresno	0	1	1	353	1,111	1,464
Fullerton	0	0	0	166	2,537	2,703
Hayward	5	26	31	301	756	1,056
Humboldt	0	1	1	124	586	710
Long Beach	0	1	1	365	2,222	2,587
Los Angeles	0	0	0	215	856	1,071
Maritime Academy	0	0	0	27	4	61
Monterey Bay	0	1	1	92	207	299
Northridge	0	0	0	181	2,325	2,506
Pomona	0	0	0	309	812	1,121
Sacramento	8	17	25	355	2,206	2,561
San Bernardino	0	0	0	264	923	1,187
San Diego	2	0	2	344	2,052	2,396
San Francisco	1	15	16	199	2,204	2,403
San Jose	1	5	6	238	2,084	2,322
San Luis Obispo	0	2	2	139	644	783
San Marcos	0	0	0	208	581	789
Sonoma	1	3	4	149	566	715
Stanislaus	0	1	1	194	561	755
Totals	**20**	**78**	**98**	**4,733**	**25,704**	**30,437**

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California State University, Systemwide Office, 2001.

Table 22
Ethnic Distribution of CCCCD and California Community College Transfer Students to UC and CSU, Full-Year 1997-98, 1998-99, 1999-00 and 2000-01

		Asian/ Pacific Islander	Black	Filipino	Latino	Native American	Other	White	Known Ethnicity Total	Non Resident Alien	No Response	Grand Total
Contra Costa College												
1997-98	UC	24	5	4	5	1	0	11	50		3	53
	CSU	30	47	17	31	2	0	46	173	3	26	202
	Total	**54**	**52**	**21**	**36**	**3**	**0**	**57**	**223**	**3**	**29**	**255**
	%	24%	23%	9%	16%	1%	0%	26%	100%			
1998-99	UC	18	5	3	6	1	1	13	47		2	49
	CSU	39	47	20	23	1	0	35	165	4	19	188
	Total	**57**	**52**	**23**	**29**	**2**	**1**	**48**	**212**	**4**	**21**	**237**
	%	27%	25%	11%	14%	1%	0%	23%	100%			
1999-00	UC	21	6	0	5	0	1	12	45		2	47
	CSU	46	47	24	20	2	0	36	175	6	30	211
	Total	**67**	**53**	**24**	**25**	**2**	**1**	**48**	**220**	**6**	**32**	**258**
	%	30%	24%	11%	11%	1%	0%	22%	100%			
2000-01	UC	7	7	4	2	0	7	13	40		1	41
	CSU	42	44	12	27	1	0	27	153	10	56	219
	Total	**49**	**51**	**16**	**29**	**1**	**7**	**40**	**193**	**10**	**57**	**260**
	%	25%	26%	8%	15%	1%	4%	21%	100%			
Diablo Valley College												
1997-98	UC	99	11	22	28	2	17	223	402		33	435
	CSU	113	37	84	90	9		521	854	16	157	1,027
	Total	**212**	**48**	**106**	**118**	**11**	**17**	**744**	**1,256**	**16**	**190**	**1,462**
	%	17%	4%	8%	9%	1%	1%	59%	100%			
1998-99	UC	106	7	35	33	2	15	175	373		97	470
	CSU	106	38	89	84	12	0	497	826	30	177	1,033
	Total	**212**	**45**	**124**	**117**	**14**	**15**	**672**	**1,199**	**30**	**274**	**1,503**
	%	18%	4%	10%	10%	1%	1%	56%	100%			
1999-00	UC	159	7	21	31	4	16	218	456		33	489
	CSU	117	25	89	98	6	0	514	849	38	189	1,076
	Total	**276**	**32**	**110**	**129**	**10**	**16**	**732**	**1,305**	**38**	**222**	**1,565**
	%	21%	2%	8%	10%	1%	1%	56%	100%			
2000-01	UC	161	10	21	39	2	39	216	488		59	547
	CSU	116	31	73	105	4	0	437	766	32	259	1,057
	Total	**277**	**41**	**94**	**144**	**6**	**39**	**653**	**1,254**	**32**	**318**	**1,604**
	%	22%	3%	7%	11%	0%	3%	52%	100%			
Los Medanos College												
1997-98	UC	4	2	2	8	1	2	10	29		2	31
	CSU	11	13	16	31	5		64	140	1	26	167
	Total	**15**	**15**	**18**	**39**	**6**	**2**	**74**	**169**	**1**	**28**	**198**
	%	9%	9%	11%	23%	4%	1%	44%	100%			
1998-99	UC	5	1	0	5	0	0	10	21		1	22
	CSU	10	8	8	27	0	0	80	133	1	20	154
	Total	**15**	**9**	**8**	**32**	**0**	**0**	**90**	**154**	**1**	**21**	**176**
	%	10%	6%	5%	21%	0%	0%	58%	100%			
1999-00	UC	4	0	0	6	1	2	11	24		5	29
	CSU	5	8	11	29	1	0	70	124	2	21	147
	Total	**9**	**8**	**11**	**35**	**2**	**2**	**81**	**148**	**2**	**26**	**176**
	%	6%	5%	7%	24%	1%	1%	55%	100%			
2000-01	UC	2	1	0	3	1	1	5	13		2	15
	CSU	4	12	4	27	0	0	70	117	0	38	155
	Total	**6**	**13**	**4**	**30**	**1**	**1**	**75**	**130**	**0**	**40**	**170**
	%	5%	10%	3%	23%	1%	1%	58%	100%			

BEST COPY AVAILABLE

Table 22

Ethnic Distribution of California Community College Transfer Students to UC and CSU, Full-Year 1997-98, 1998-99, 1999-00 and 2000-01

		Asian/ Pacific Islander	Black	Filipino		Latino	Native American	Other	White	Known Ethnicity Total	Non Resident Alien	No Response	Grand Total
Contra Costa CCD Total													
1997-98	UC	127	18	28		41	4	19	244	481	0	38	519
	CSU	154	97	117		152	16	0	631	1,167	20	209	1,396
	Total	**281**	**115**	**145**		**193**	**20**	**19**	**875**	**1,648**	**20**	**247**	**1,915**
	%	17%	7%	9%		12%	1%	1%	53%	100%			
1998-99	UC	129	13	38	0	44	3	16	198	441	0	100	541
	CSU	155	93	117	0	134	13	0	612	1,124	35	216	1,375
	Total	**284**	**106**	**155**		**178**	**16**	**16**	**810**	**1,565**			
	%	18%	7%	10%		11%	1%	1%	52%	100%			
1999-00	UC	184	13	21	0	42	5	19	241	525	0	40	565
	CSU	168	80	124	0	147	9	0	620	1,148	46	240	1,434
	Total	**352**	**93**	**145**		**189**	**14**	**19**	**861**	**1,673**			
	%	21%	6%	9%		11%	1%	1%	51%	100%			
2000-01	UC	170	18	25	0	44	3	47	234	541	0	62	603
	CSU	162	87	89	0	159	5	0	534	1,036	42	353	1,431
	Total	**332**	**105**	**114**		**203**	**8**	**47**	**768**	**1,577**			
	%	21%	7%	7%		13%	1%	3%	49%	100%			
Statewide Total													
1997-98	UC	2,806	293	340		1,300	102	272	4,487	9,600	0	610	10,210
	CSU	6,346	2,442	1,626		8,464	565	0	18,341	37,784	1,475	6,287	45,546
	Total	**9152**	**2735**	**1966**		**9764**	**667**	**272**	**22828**	**47,384**			
	%	19%	6%	4%		21%	1%	1%	48%	100%			
1998-99	UC	2,377	228	296		1,302	97	288	4,000	8,588	0	1,573	10,161
	CSU	6,230	2,105	1,711		8,201	475	0	18,375	37,097	1,543	6,349	44,989
	Total	**8607**	**2333**	**2007**		**9503**	**572**	**288**	**22375**	**45,685**			
	%	19%	5%	4%		21%	1%	1%	49%	100%			
1999-00	UC	2,800	272	314		1,432	92	298	4,763	9,971	0	856	10,827
	CSU	6,056	2,257	1,776		9,286	442	0	19,048	38,865	1,969	6,872	47,706
	Total	**8856**	**2529**	**2090**		**10718**	**534**	**298**	**23811**	**48,836**			
	%	18%	5%	4%		22%	1%	1%	49%	100%			
2000-01	UC	2,721	316	355		1,601	65	529	4,800	10,387	0	828	11,215
	CSU	5,834	2,343	1,687		9,606	439	0	18,650	38,559	2,037	7,304	47,900
	Total	**8555**	**2659**	**2042**		**11207**	**504**	**529**	**23450**	**48,946**			
	%	17%	5%	4%		23%	1%	1%	48%	100%			

Source: Office of District Research, Contra Costa CCD. Based on **Student Profiles, November 2001,** California Postsecondary Education Commission.

Table 23

Number of CCCCD Transfers to Independent Institutions

	CCC	DVC	LMC	CCCCD
1991-92	14	106	14	134
1992-93	9	103	20	132
1993-94	19	130	12	161
1994-95	17	124	20	161
1995-96	6	43	4	53
1996-97	9	23	7	39
1997-98	5	39	6	50
1998-99	9	48	6	63
1999-00	15	63	11	89
2000-01	18	137	24	179

Source: Adapted from **Student Profiles, November 2001,** California Postsecondary Education Commission.

Table 24a

California Postsecondary Education Commission
Community College Students Who Transfer to AICCU Member Institutions
Fall 2000

Contra Costa College

	Asian		Black		Latino		Nat Am		No Resp		NR Alien		White		Total		Grand Total
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
Azusa Pacific University	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	**1**
Claremont McKenna College	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	**1**
College of Notre Dame	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	**1**
Dominican University of California	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1	2	**3**
Holy Names College	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	**1**
Menlo College	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	**1**
Mills College	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	**5**
National University	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	**2**
University of San Francisco	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	3	**3**
Total	**0**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**5**	**0**	**1**	**2**	**5**	**4**	**14**	**18**

Please note: Data reflects responses from 46 of the 65 Association of Independent California Colleges and University (AICCU) member institutions that responded to the Fall 2000 Sources of New Transfer Students Survey.

National University data reflects full-year data.

Source: Office of District Research, Contra Costa CCD. Based on Fall 2000 unpublished data provided by California Postsecondary Education Commission.

Table 24b

California Postsecondary Education Commission
Community College Students Who Transfer to AICCU Member Institutions
Fall 2000

Diablo Valley College

	Asian		Black		Latino		Nat Am		No Resp		NR Alien		White		Total		Grand Total
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
Azusa Pacific University	0	0	0	0	1	0	0	0	0	0	0	0	1	1	2	1	3
Biola University	0	0	0	0	1	0	0	0	0	0	0	0	2	0	2	0	2
California College of the Arts and Crafts	1	0	0	0	0	0	0	0	0	0	1	0	3	5	5	5	10
Claremont McKenna College	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
College of Notre Dame	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
Dominican University of California	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	3	3
Holy Names College	0	0	0	0	0	0	0	0	0	10	0	0	0	1	0	2	2
John F. Kennedy University	0	0	0	0	1	2	0	0	0	0	0	0	0	8	1	10	11
La Sierra University	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1
Loyola Marymount University	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2
Mills College	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
National University	1	1	0	1	1	1	0	0	0	0	0	0	3	7	5	10	15
Point Loma Nazarene University	0	0	0	0	0	0	1	0	0	0	0	0	2	2	3	2	5
Saint Mary's College of California	0	0	0	0	0	0	0	0	18	29	0	0	0	0	18	29	47
Santa Clara University	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	1	2
Simpson College	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	3	5
University of La Verne	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
University of Redlands	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1		1
University of San Diego	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	4
University of San Francisco	1	3	0	0	2	1	0	2	0	0	0	0	0	3	3	9	12
University of Southern California	1	1	0	0	0	0	0	0	0	0	0	1	1	0	2	2	4
University of the Pacific	0	1	0	0	1	0	0	0	0	0	0	0	1	1	2	2	4
Total	**5**	**6**	**1**	**2**	**7**	**5**	**1**	**2**	**19**	**32**	**1**	**1**	**19**	**36**	**53**	**84**	**137**

Please note: Data reflects responses from 46 of the 65 Association of Independent California Colleges and University (AICCU) member institutions that responded to the Fall 2000 Sources of New Transfer Students Survey.

National University data reflects full-year data.

Source: Office of District Research, Contra Costa CCD. Based on Fall 2000 unpublished data provided by California Postsecondary Education Commission.

BEST COPY AVAILABLE

Table 24c

California Postsecondary Education Commission
Community College Students Who Transfer to AICCU Member Institutions
Fall 2000

Los Medanos College

	Asian		Black		Latino		Nat Am		No Resp		NR Alien		White		Total		Grand Total
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
California College of the Arts and Crafts	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
Fresno Pacific University	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2
John F. Kennedy University	0	0	0	1	0	1	0	0	0	0	0	0	1	3	1	5	6
La Sierra University	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Loyola Marymount University	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
National University	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1	3
Point Loma Nazarene University	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Saint Mary's University of California	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	2	3
Simpson College	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2
University of Redlands	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	0	2
University of the Pacific	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	**0**	**1**	**1**	**1**	**0**	**2**	**1**	**0**	**1**	**3**	**0**	**0**	**7**	**7**	**10**	**14**	**24**

Please note: Data reflects responses from 46 of the 65 **Association of Independent California Colleges and University (AICCU)** member institutions that responded to the Fall 2000 Sources of New Transfer Students Survey.

National University data reflects full-year data.

Source: Office of District Research, Contra Costa CCD. Based on Fall 2000 unpublished data provided by California Postsecondary Education Commission.

Transfer Eligible: As summarized in **Table 25a**, CCCCD's total of transfer prepared students declined by 15.1% from its 1997-98 level. One possible explanation for this decline is that students may be transferring to four-year post-secondary institutions that, unlike UC and CSU, do not require them to complete 56 units before they can be "transfer eligible" as defined by the State Chancellor's Office. Another possibility is that students who would ordinarily be transfer candidates are becoming employed full-time before completion of 56 units.

As can be observed in **Table 25b**, the number of CCCCD transfer prepared students decreased by 15% between 97-98 and 99-00, whereas the Bay 10 and other multi-college districts declined by 7% and 9% respectively.

4. Academic Performance after Transfer (GPA and Persistence rates):

No district/college specific data is available at this writing for UC transfers. Efforts are being made to retrieve these for future reports.

Tables 26a -26f display academic performance data for CCCCD transfers to CSU Fall 1999. As can be observed, the pre-admission GPA of CCCCD transfers was equal to or exceeded the GPA for all community college transfers to CSU, varying from 2.93 to 2.97. The first-year GPA of CCCCD transfer students to CSU is not significantly different than the 2.90 that was achieved by all CCC transfers, with the exception of CCC transfers who averaged a GPA of 2.77. The relative influence of academic or social factors to this latter variance is not known. It is worth noting that 168 of these transfers had lower division status. This may reflect the recently instituted practice by UC and CSU which allows students to transfer and complete their last 1-2 required courses at their campuses. With one exception, transfers with lower-division status did not perform as well as did transfers with upper-division status. These findings suggest that on average CCCCD is preparing its CSU transfers as well as other districts.

5. Degree Completion Rate:

Tables 27a and 27b display the number of degrees and certificates awarded by CCCCD and the comparison of this total to those of Bay 10 and multi-college districts. As can be seen, the number of both degrees and certificates has decreased by 20.0% for the time period shown. In comparison to Bay 10 and other multi-college districts, the percent change in CCCCD degrees awarded is significantly less but the change in its number of certificates is substantially greater than that of the comparison institutions. It should be noted that CCCCD does not automatically give students a degree when they have met all related requirements as do other multi-college districts. Rather it requires the student to submit a request for a degree. This practice insures that the student is not rendered ineligible for financial aid or other types of support without his or her approval. The finding that CCCCD is generating less degrees than its counterparts may reflect this difference in their degree granting practices.

Table 25a

Changes in the Number of Students Who Became Transfer Prepared

	1997-98	1998-99	1999-00	97/98-99/00 % Change
CCC	429	387	356	-17.0
DVC	2,153	1,906	1,844	-14.4
LMC	400	357	331	-17.3
CCCCD	2,982	2,650	2,531	-15.1

Table 25b

Changes in the Number of Students Who Became Transfer Prepared Compared with Average Number for Bay 10 and Multi-College* Districts

	1997-98	1998-99	1999-00	97/98-99/00 % Change
CCCCD	2,982	2,650	2,531	-15.1
Bay 10	2,085	2,223	1,938	-7.1
Multi-College	2,814	2,889	2,560	-9.0

*Los Angeles College District, which has nine colleges, has been excluded from the Multi-College analysis. Its funding and performance patterns tend to be atypical and its inclusion would invalidate comparative analysis. See Addendum 1 for specification of Bay 10 and Multi-College districts.

"Transfer Prepared" is defined by the State Chancellor's Office as the number of students who achieved 56 transferable units with a grade-point average of 2.00 with in a six-year period. Students achieving transfer prepared status in a given year are not counted in subsequent years.

Source: Office of District Research, Contra Costa CCD. Based on **System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

Table 26a

Pre-Admission Grade Point Average for Fall 1999 Contra Costa College and California Community College (CCC) Transfers to CSU by Lower and Upper Division Status

	GPA*			
	Contra Costa College		All CCC Transfers	
Lower Division	3.00	(n=24)	2.87	(n=4,736)
Upper Division	2.97	(n=120)	2.94	(n=25,718)
Total	**2.97**	**(n=144)**	**2.93**	**(n=30,454)**

Table 26b

CSU First-Year Persistence Rates and GPA for Fall 1999 Contra Costa College and California Community College Transfers by Lower and Upper Division Status

	Enrolled*	Persisting*	Rate	GPA*	
Contra Costa College					
Lower Division	24	15	62%	2.87	(n=15)
Upper Division	120	96	80%	2.76	(n=94)
Total	**144**	**111**	**77%**	**2.77**	**(n=109)**
All CCC Transfers					
Lower Division	4,736	3,824	81%	2.80	(n=3,700)
Upper Division	25,718	21,820	85%	2.91	(n=21,334)
Total	**30,454**	**25,644**	**84%**	**2.90**	**(n=25,034)**

* Only those records for admitted and enrolled transfers that contained all relevant information were evaluated for these analyses. Persistence is fall-to-fall enrollment.

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California State University, Systemwide Office, 2001.

Table 26c

Pre-Admission Grade Point Average for Fall 1999 Diablo Valley College and California Community College (CCC) Transfers to CSU by Lower and Upper Division Status

	GPA*			
	Diablo Valley College		**All CCC Transfers**	
Lower Division	2.92	(n=124)	2.87	(n=4,736)
Upper Division	2.96	(n=565)	2.94	(n=25,718)
Total	**2.95**	**(n=689)**	**2.93**	**(n=30,454)**

Table 26d

CSU First-Year Persistence Rates and GPA for Fall 1999 Diablo Valley College and California Community College Transfers by Lower and Upper Division Status

	Enrolled*	**Persisting***	**Rate**	**GPA***	
Diablo Valley College					
Lower Division	124	99	80%	2.85	(n=97)
Upper Division	565	494	87%	2.88	(n=478)
Total	**689**	**593**	**86%**	**2.87**	**(n=575)**
All CCC Transfers					
Lower Division	4,736	3,824	81%	2.80	(n=3,700)
Upper Division	25,718	21,820	85%	2.91	(n=21,334)
Total	**30,454**	**25,644**	**84%**	**2.90**	**(n=25,034)**

* Only those records for admitted and enrolled transfers that contained all relevant information were evaluated for these analyses. Persistence is fall-to-fall enrollment.

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California State University, Systemwide Office, 2001.

BEST COPY AVAILABLE

Table 26e

Pre-Admission Grade Point Average for Fall 1999 Los Medanos College and California Community College (CCC) Transfers to CSU by Lower and Upper Division Status

	GPA*			
	Los Medanos College		**All CCC Transfers**	
Lower Division	2.94	(n=20)	2.87	(n=4,736)
Upper Division	2.93	(n=78)	2.94	(n=25,718)
Total	**2.93**	**(n=98)**	**2.93**	**(n=30,454)**

Table 26f

CSU First-Year Persistence Rates and GPA for Fall 1999 Los Medanos College and California Community College Transfers by Lower and Upper Division Status

	Enrolled*	**Persisting***	**Rate**	**GPA***	
Los Medanos College					
Lower Division	20	18	90%	2.83	(n=17)
Upper Division	78	65	83%	2.91	(n=60)
Total	**98**	**83**	**85%**	**2.89**	**(n=77)**
All CCC Transfers					
Lower Division	4,736	3,824	81%	2.80	(n=3,700)
Upper Division	25,718	21,820	85%	2.91	(n=21,334)
Total	**30,454**	**25,644**	**84%**	**2.90**	**(n=25,034)**

* Only those records for admitted and enrolled transfers that contained all relevant information were evaluated for these analyses. Persistence is fall-to-fall enrollment.

Source: Office of District Research, Contra Costa CCD. Adapted from data provided by California State University, Systemwide Office, 2001.

Table 27a

Number of Degrees and Certificates Awarded

	1996-97		1997-98		1998-99		1999-00		95/96-99/00	Total 96/97-99/00	
CCCCD	#	(%)	#	(%)	#	(%)	#	(%)	% Change	#	(%)
Degrees	1,411	(70%)	1,338	(75%)	1,390	(72%)	1,127	(70%)	-20.1	5,266	(72%)
Certificates	595	(30%)	447	(25%)	529	(28%)	474	(30%)	-20.3	2,045	(28%)
Total	**2,006**		**1,785**		**1,919**		**1,601**		**-20.2**	**7,311**	
CCC											
Degrees	311	(66%)	276	(68%)	317	(68%)	264	(65%)	-13.0	1,168	(67%)
Certificates	161	(34%)	129	(32%)	145	(32%)	140	(35%)	-14.4	575	(33%)
Total	**472**		**405**		**460**		**404**		**-25.1**	**1,741**	
DVC											
Degrees	866	(80%)	845	(80%)	840	(77%)	649	(73%)	-16.0	3,200	(76%)
Certificates	282	(20%)	217	(20%)	256	(23%)	237	(27%)	-22.8	992	(24%)
Total	**1,148**		**1,062**		**1,096**		**886**		**-8.5**	**4,192**	
LMC											
Degrees	234	(61%)	217	(68%)	235	(65%)	214	(69%)	-36.2	900	(67%)
Certificates	152	(39%)	101	(32%)	128	(35%)	97	(31%)	-19.4	478	(36%)
Total	**386**		**318**		**320**		**311**			**1,335**	

Source: Office of District Research, Contra Costa CCD. Based on **System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

Table 27b

Number of Degrees/Certificates Awarded by CCCCD Compared with Average Number of Awards by Bay 10 and Multi-College Districts*

	1996-97	1997-98	1998-99	1999-00	96/97-99/00	96/97-99/00 Total
Degrees	#	#	#	#	% Change	#
CCCCD	1,411	1,338	1,390	1,127	**-20.1**	**5,277**
Bay 10	906	815	893	880	**-2.9**	**3,494**
Multi-College	1,363	1,384	1,395	1,421	**4.3**	**5,563**
Certificates						
CCCCD	595	447	529	880	**47.9**	**2,454**
Bay 10	484	388	468	405	**-16.3**	**1,745**
Multi-College	568	535	568	539	**-5.1**	**2,210**
Degrees & Certificates						
CCCCD	2,006	1,785	1,919	1,601	**-20.2**	**7,325**
Bay 10	1,390	1,204	1,361	1,285	**-7.6**	**5,240**
Multi-College	1,931	1,918	1,963	1,960	**1.5**	**7,772**

*Los Angeles College District, which has nine colleges, has been excluded from the Multi-College analysis. Its funding and performance patterns tend to be atypical and its inclusion would invalidate comparative analysis. See Addendum 1 for specification of Bay 10 and Multi-College districts.

Source: Office of District Research, Contra Costa CCD. Based on **System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

Partnership for Excellence Transfer Goals

1. **Increase in Number of Transfer Students**: CCCCD's goal to increase the annual number of UC transfers from 511 to 681 seems reachable at this time given its total of 603 for 2000-01. Its goal to increase CSU transfers totals from 1,650 to 2,178, however, will require concerted effort to reach given its total of 1,431 for 2000-01. **(See Table 28)**

2. **Increase in Number of Students Who Become Transfer Prepared to CSU and UC**: CCCCD's goal of increasing its number of transfer prepared students from 2,982 to 3,789 does not seem very likely at this time given that it had 2,531 such students in 1999-00. CCCCD will have to seriously reconsider the strategies it is using for reaching this goal. As is known, changes in the total of transfer prepared students can reflect many factors, including: the increasing number of options for transfer bound students to attend four-year institutions other than UC and CSU; the growing number of popular majors that do not have openings at UC/CSU and that prevent CCCCD students from transferring to these institutions; and the increasing number of attractive job opportunities. **(See Table 29)**

3. **Increase in Successful Transfer Course Completion Rates**: CCCCD will very likely meet its PFE goal of increasing transfer course completion rates from 70% to 72.5% given that it achieved a 71.6% rate in 1999-00. **(See Table 30)**

Table 28

Changes in the Number of Students Who Transfer to UC and CSU Over 1997-98 Levels

	1995-96 Transfers	**2000-01 Transfers**	**95/96-00/01**	**2005-06 Target**
UC Transfers	**#**	**#**	**% Change**	**#**
CCC	48	41	**-14.1**	64
DVC	436	547	**25.5**	581
LMC	27	15	**-44.4**	36
CCCCD	**511**	**603**	**18.0**	**681**
CSU Transfers				
CCC	193	219	**13.5**	255
DVC	1,296	1,057	**-18.4**	1,711
LMC	161	155	**-3.7**	212
CCCCD	**1,650**	**1,431**	**-13.3**	**2,178**

Source: Office of District Research, Contra Costa CCD. Based **on System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

Table 29

Changes in the Number of Students Who Became Transfer Prepared Over 1997-98 Levels

	1997-98	**1999-00**	**% Change**	**2005-06 Target**
	# Transfer Prepared	# Transfer Prepared	%	#
CCC	429	356	**-20.5**	545
DVC	2,153	1,844	**-16.8**	2,736
LMC	400	331	**-20.8**	508
CCCCD	**2,982**	**2,531**	**-17.8**	**3,789**

Source: Office of District Research, Contra Costa CCD. Based on **System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

Table 30a

Changes in the Overall Rate of Successful Course Completion Over 1995-96 Performance Levels for Transfer Courses

	1995-96 Baseline	1998-99 Performance	1999-00 Performance	95/96-99/00	2005-06 Target
	% Successful	% Successful	% Successful	**% Change**	%
CCC	67.5	73.9	72.4	**7.3**	70.0
DVC	71.0	71.9	72.0	**1.4**	73.5
LMC	69.6	69.1	70.4	**1.1**	72.1

Table 30b

Successful Transfer Course Completion Rates for CCCCD Compared with Average Such Rates of Bay 10, Multi-College* Districts, and System

	Baseline 1995-96	1997-98	1998-99	1999-00	95/96-99/00
	% Successful	% Successful	% Successful	% Successful	**% Change**
CCCCD	70.2	70.1	71.8	71.6	**2.0**
Bay 10	69.6	71.5	71.5	70.2	**0.9**
Multi-College	68.1	68.3	68.7	68.0	**-0.1**
Systemwide	68.3	68.7	68.7	68.7	**0.6**

*Los Angeles College District, which has nine colleges, has been excluded from the Multi-College analysis. Its funding and performance patterns tend to be atypical and its inclusion would invalidate comparative analysis. See Addendum 1 for specification of Bay 10 and Multi-College districts.

Source: Office of District Research, Contra Costa CCD. Based on **System Performance on Partnership for Excellence Goals,** Chancellor's Office, California Community Colleges, April 2001.

Next Steps

On January 25, 2002 the District Planning Council met to consider Transfer Education at CCCCD, identifying current strengths and challenges. In addition to the Council membership, faculty and staff involved in support of Transfer Education at the Colleges were invited as "content experts" to inform the council discussions. Results of the dialogue are included below. The data and information provided in this report to the Governing Board will also be used in the on-going cycle of districtwide planning and will be of particular value as the District Strategic Plan for 2004-07 is formulated during 2003.

Current Best Practices in Transfer Education at CCCCD

Programs and Services That Support Transfer Success

- **"College Days"** -- representatives from California four-year colleges/universities visit DVC to inform them of their programs and services.
- **Transfer Day Events** on each campus -- four-year postsecondary institutions from California and other major states are invited to come and share information with students about their institutions and, in particular, transfer programs/services.
- **Transfer Center** -- purpose is to keep students informed about the transfer process; to organize communication between four-year reps and the student
- **TOP -- Taxonomy of Programs,** a common classification by which colleges identify programs and courses that help meet transfer requirements.
- **Transfer/Articulation agreements** with UC and CSU, Private Colleges -- a written contract that guarantees a CCCCD student admission to the four-year institution signing the agreement after completing a specified course of study.
- **PUENTE** Program -- a transfer preparatory program designed to increase the number of Latino students transferring from community colleges to four-year institutions.
- **CAP -- Cooperative Admissions Program,** a program for students who were accepted to UC Berkeley but redirected to CCCCD with a guaranteed to be admitted after completion of transfer requirements.
- **CAN -- California Articulation Number,** a statewide common course numbering system for comparable lower division transfer courses across the three public segments of higher education.
- **ASSIST -- Articulation System Stimulating Inter-institutional Student Transfers,** a computerized articulation and transfer planning system supported by the public higher education segments.
- **Center for Science Excellence** -- a scholarship program with the goal of increasing the number of underrepresented graduates in the sciences and math.
- **Weekend academics** -- Similar to the PACE program; designed for students who have a limited amount of time for classes consisting of two courses per session with two eight-week sessions scheduled.
- **Transfer ceremony** – developed to identify and recognize students who transfer to a four-year college without completing their A.A. degree.
- **Transfer e-Club** -- Campus cruisers at CCC provide students with free email to access transfer information.
- **Transfer success course** -- focus on careers and the transfer process for attending a four-year institution.

- **Honors transfer program** -- this is an intensive program designed to prepare highly motivated students for transferring to well know selective universities and to build their intellectual/social skills for succeeding outside academe.
- **EOPS -- Extended Opportunity Programs and Services** – provides students with special challenges and disadvantages the additional services they need to achieve their academic goals in general and transfer goals in particular.
- **Transfer Academy** -- for recent high school graduates, provides a 5-semester mentoring program and with book grants up to the last semester.
- **Transfer Olympic Program** -- cohort program, help students to determine the type and number of transfer units they've completed, to complete their English/Math programs, and provides an annual study recognition program.
- **Engineering Transfer Program** -- transfer agreement with UCB and articulation of courses
- **UCB Transfer Alliance Program** -- redirection program from UCB to CCCCD for the most eligible after high school students.
- **PACE -- Project Adult College Education** -- weekend college programs having ties to Transfer support systems. It allows working adults to go to two classes a week and complete their AA degree or transfer requirements within two to three years while still working full-time.
- **Collaborations with 4-year Institutions** -- transfer agreements; cross registration agreements, and concurrent enrollment agreements.
- **High school articulation** -- written agreements with the K-12 system to allow a high school student to take required K-12 graduation course at a community college.
- **Honor Society and other student organizations.**
- **African American Staff Association Recognition Program** -- Scholarships sponsored by the African American Faculty and Staff.
- **Transfer Achievement** -- Title III cohort program with a general transfer focus that will begin fall 2002.
- **Mentor programs** -- to encourage student retention by linking them with mentors from the community (i.e., instructors from the university system or business).
- **Concurrent enrollment programs** (high school/district/CSU/UC) -- allows high school students to enroll in college courses while still attending high school and community college students to enroll in university courses while still attending community college.
- **Long-term commitment** -- provides stipend and mentoring, uses a cohort model, and conducts follow ups of transfers. For transfer-bound with major focus and has ties to Transfer Center.
- **Academic athletic program transfer** – prepares athletes for transferring. Provides student support using a series of study groups, and performs daily monitoring of enrollment and periodic tracking of students' progress.

Faculty, Counselor, Staff Expertise and Service Orientation

- Alignment of curriculum/faculty/services
- Effective faculty development program
- Faculty knowledge of transfer requirements (staff development)
- Healthy relationship between faculty, administration, staff
- Atmosphere for learning services
- Strong support systems-network student services
- Faculty major advising
- Early Alert
- Peer tutoring/counseling
- On-the-Spot Admission
- Identification of transfer students
- Student assessment
- IEP (Individual Education Plans)
- Pre-requisites/advisory

Communication Systems and Strategies to Support Transfer Student Access and Success

- Websites at each college that provide current information
- Strong Transfer prep curriculum and advisory courses
- Written transfer program description
- Orientation sessions for Transfer Students
- Transfer advising intervention
- Counseling participation with UC/CSU
- Four year campus tours
- High school college nights
- Financial aid presentations in transfer courses
- Letter on transfer/financial aid to all students with a transfer goal
- Senior outreach days
- Success "stories" and feedback
- Alumni connections
- Student handbook
- Partnerships with industry
- Select criteria-learning commitment, major focus, full-time status, "B" GPA or evidence of capacity to succeed, commitment to student period daily (stipend contingent on study period)
- Guarantee admission after 30 units into major
- Basic skills program-college level-transfer?

Challenges in Transfer Education at CCCCD

Availability of resources-human, fiscal and physical

- Upper level courses are essential but not cost effective with low enrollments
- Deteriorating facilities, insufficient library and laboratory space, student services space and overcrowded classrooms
- Insufficient resources results too often in "one size" interventions, programs Counseling understaffed

Data Access, Research Support and Outcomes Measures

- Lack of research on who is a successful transfer student
- Assessment of Student Learning needs to be expanded
- Need to evaluate effectiveness of various interventions, activities
- The definition of "transfer cohort" is unclear
- There is AA degree↔transfer ready disconnect
- Coordinating all transfer-related programs requires staff and data support
- Lack of evaluation of prerequisite course effectiveness (potential barriers)
- Data-driven decision-making and planning needs to be a stronger component of the culture.
- Transfer candidates need to be identified early, transfer functions need to be evaluated and better tracking of learners after they leave CCCCD needs to occur.
- Currently high school graduates who took courses at CCCCD during high school and enter UC/CSU after high school graduation are not tracked as "transfer successes" from CCCCD.

Level of learner preparation and support services needs of students

- Educational demographics of community
- Educational outcomes of feeder schools
- Undecided students, statistically, do not persist in educational goals as consistently as students with declared majors.
- Underrepresented and/or under-prepared students may take longer to "move" through the curriculum – they drop out, etc., repeat classes and use up financial aid options before they successfully transfer.
- Low student aspirations, family challenges, low socioeconomic status, inadequate financial aid, student motivation, self-perceptions, and value of education vs. survival (cultural, family, peers, support)
- Understanding barriers to transfer and assisting students in negotiating barriers is time and resource intensive
- Student "awareness" of scholarships, financial aid, grants, services, etc. needs to be expanded.

Challenges related to existing programs and services

- Strength of academics, services/curriculum
- Limited/restricted articulation agreements (majors)
- Out of state/independents funding-space
- Degree audit-early alert
- Transfer restrictions at transfer institution
- Curricular gaps, especially in sciences, math, engineering, upper level English courses
- Vocational programs not transfer-oriented
- Lack of counseling available at feeder schools
- Articulation needs to be more comprehensive
- Consistent faculty partnerships in promoting transfer
- Need effective partnerships with middle and high school students
- Need more complete initial assessment of student needs ("whole student")
- Don't effectively promote identification of major
- AA degrees that do facilitate transfer
- Improved relations with community and K-12 system and parents
- Integration between programs, schools, district, etc.
- CAN (California Articulation Number) difficulties
- Non-traditional scheduling that permits transfer course

General challenges and issues

- Quality of communications and perception of information-up and down the communication pathway— communication system-wide
- Collaboration vs. competition
- Perceptions of colleges by community/students
- Lack of teachers in the future (graduation rates, competition with industry…)
- Trying to serve all the different "missions" of CC
- Bureaucratic blocks (system blocks)
- Challenge of attracting transfer candidates

PARTICIPANT	TITLE	PLANNING COUNCIL
	Contra Costa College	
Helen Carr	President	X
Tim Clow	Assistant Dean, Research	
Donna Floyd	Director, Student Programs and Services	
Beth Goehring	Chair, Curriculum and Instruction Committee	
Saul Jones	President, Academic Senate/Nursing	X
Susan Lamb	Division Chair	
Nouri Shahabi	Engineering Instructor	
Kenyetta Tribble	Interim Director, Transfer Center	
McKinley Williams	Vice President	
	Diablo Valley College	
Francisco Arce	Vice President	
Amanda Chamberlain	Transfer Center and Career Services Coordinator	
Mark Edelstein	President	X
Mohamed Eisa	Assistant Dean, Planning, Research and Student Outcomes	
Sharon García	Biology Instructor	X
Cheryll LeMay	Counselor	
Leo Lieber	President, Classified Senate	
Gay Ostarello	President, Academic Senate/Science	X
Diane Scott-Summers	Vice President	
Kate Wothe	Counselor	
	Los Medanos College	
Robin Aliotti	Interim Title III Coordinator and Local Activity Director	
Art Alatorre	Director of Enrollment Management	
Peter García	Vice President	
Dan Henry	Executive Dean	
Erich Holtmann	Math Instructor	
Marie Karp	Transfer Center Coordinator	
Thais Kishi	Director, Brentwood Center	
Linda Kohler	President, Classified Senate	X
Richard Livingston	Senior Dean	
Humberto Sale	College Research Coordinator	
Jeannine Stein	TAP Director	
Lois Yamakoshi	President, Academic Senate/Math	X
Michael Yeong	Member, TAP Cohort Advisory Board	

PARTICIPANT	TITLE	PLANNING COUNCIL
	District Office	
Frank Baratta	Director, District Research	
Jackie Flaggs	District Governance Council	X
Phyllis Gilliland	Vice Chancellor, Planning and Resource Development	X
John Hendrickson	Vice Chancellor, Business Services	X
Pat Kaya	Executive Assistant, Planning and Resource Development	
Chuck Spence	Chancellor	
Katrin Spinetta	Principal Administrative Analyst, Grants	

Addendum 1

List of Bay 10 and Multi-College Districts

Bay 10 Districts

CHABOT-LAS POSITAS	(Chabot, Las Positas)
CONTRA COSTA	(Contra Costa, Diablo Valley, Los Medanos)
FOOTHILL-DE ANZA	(De Anza, Foothill)
FREMONT-NEWARK	(Ohlone)
MARIN	(Marin, Marin CED)
PERALTA	(Alameda, Laney, Merritt, Vista)
SAN FRANCISCO	(San Francisco City)
SAN JOSE-EVERGREEN	(Evergreen Valley, San Jose City)
SAN MATEO	(Canada, San Mateo, Skyline)
WEST VALLEY-MISSION	(Mission, West Valley)

Multi-College* Districts Statewide

CHABOT-LAS POSITAS	(Chabot, Las Positas)
COAST	(Coastline, Golden West, Orange Coast)
CONTRA COSTA	(Contra Costa, Diablo Valley, Los Medanos)
FOOTHILL-DE ANZA	(De Anza, Foothill)
GROSSMONT-CUYAMACA	(Cuyamaca, Grossmont)
KERN	(Bakersfield, Cerro Coso, Porterville)
LOS RIOS	(American River, Cosumnes River, Sacramento City)
MARIN	(Marin, Marin CED)
NORTH ORANGE	(Cypress, Fullerton, North Orange Adult)
PERALTA	(Alameda, Laney, Merritt, Vista)
RANCHO SANTIAGO	(Rancho Santiago CED, Santa Ana)
SAN BERNARDINO	(Crafton Hills, San Bernardino)
SAN DIEGO	(San Diego Adult, San Diego City, Mesa, Miramar)
SAN JOSE-EVERGREEN	(Evergreen Valley, San Jose City)
SAN MATEO	(Canada, San Mateo, Skyline)
SANTA BARBARA	(Santa Barbara CED, Santa Barbara City)
SOUTH ORANGE	(Irvine Valley, Saddleback)
STATE CENTER	(Fresno City, Kings River)
VENTURA	(Moorpark, Oxnard, Ventura)
WEST VALLEY-MISSION	(Mission, West Valley)
YOSEMITE	(Columbia, Modesto)

* Los Angeles which has nine colleges has been excluded from the Multi-College analysis.

Glossary

Definitions and Explanations of Commonly-used Transfer Terms

Articulation - Sets of community college courses that CSU and UC faculty agree to accept as having the focus, content and rigor necessary to meet course requirements at the baccalaureate institutions. Formal course articulation agreements generally fall within one of three areas: (1) general education breadth agreements, such as those represented by IGETC, (2) transferable course agreements, such as those approved by the State University in various systemwide decrees, and (3) course-by-course agreements, which are generally used to build articulation of lower-division coursework required for a particular major.

Articulation Agreement - An official agreement in which one collegiate institution agrees to accept specific courses or groups of courses from an-other collegiate institution in place of its own courses.

ASSIST (Articulation System Stimulating Interinstitutional Student Transfer) - ASSIST is a computerized student-transfer information sys-tem that displays reports of how course credits earned at one California college or university can be applied when transferred to another. ASSIST is the official repository of articulation for California's colleges and universities and therefore provides the most accurate and up-to-date information available about student transfer in California. ASSIST's mission is to facilitate the transfer of California Community College students to California's public 4-year universities by providing an electronic system for academic planning, which delivers accurate, timely, and complete in-formation and operates as the official repository of articulation information for the state of California.

CAN (California Articulation Number System) - CAN was created to promote the transfer of CCC students to UC/CSU institutions by simplifying the identification of transferable CCC courses and indicating the specific disciplines and programs for the UC/CSU institutions to which those course are transferable, though most UC campuses do not participate in CAN. Specifically CAN is designed as a cross-reference course identification for a common core of lower-division, transferable, major preparation courses commonly taught on CCC, CSU, and UC campuses. CAN facilitates transfer by establishing the academic integrity of a course and then insuring its transfer to a CAN participating institution.

Catalog Rights - A policy that allows, in certain circumstances, a college student to select the set of requirements, he/she will follow to qualify for university graduation.

Course articulation, major-specific - Sets of courses that CSU and UC faculty accept as having the focus, content and rigor necessary to meet course prerequisite requirements for specific majors that have lower division requirements. The term discipline-specific is often used within SB 121, by former Senator Gary Hart (Chapter 1188, Statutes of 1991) to refer to major-specific course articulation agreements. This articulation is also referred to as "Major Prep" articulation and, for prospective transfer students, is generally preferable to course-to-course articulation. Articulation agreements specific to the community college student's major of choice are more focused and tend to require that the student take fewer courses in general than non major-specific agreements.

Course articulation, system wide - Agreements by faculty that a set of courses offered by community colleges are equivalent to similar courses offered at CSU and UC. Credits earned by students in these courses are accepted by every campus within CSU or UC and are applied toward degree requirements. Generally, these courses are lower-division, general education courses.

General Education - A program of courses in the arts and sciences that provides students with a broad educational experience. Courses typically are introductory in nature and provide students with fundamental skills and knowledge in mathematics, English, arts, humanities, and physical, biological, and social sciences. Transfer students often take these classes while attending a community college. Completion of a general education program is required for the baccalaureate degree.

General Education Breadth Requirements - A specific program of courses that a student may use to fulfill CSU general education requirements for the baccalaureate degree. Some of these courses may be taken at a community college or other accredited college or university prior to transfer to a CSU campus.

IMPAC (Intersegmental Major Preparation Articulated Curriculum) - IMPAC is an effort supervised by the Intersegmental Council of Academic Senates (ICAS) to get faculty to work together to develop a common understanding of major preparation requirements around the state. IMPAC is one of many efforts to get CSU and UC faculty, respectively, to agree on expected course outcomes so that faculty in the system will have consistent standards to use to develop actual articulation agreements with other higher education systems. IMPAC, (initiated in 1999-2000) is funded through contract funds allocated through the California Community Colleges.

Impacted Programs - Refers to those majors that receive more applications during the initial application filing period than there are spaces available. A major may be impacted on one campus, several campuses, or all campuses where it is offered.

Intersegmental General Education Transfer Curriculum (IGETC) - often referred to as the "Common-core transfer curriculum," IGETC is a general education program that community college students may use to fulfill lower-division general education requirements at either the CSU or UC without the need, after transfer, to take additional lower-division general education courses. All California community colleges offer an approved list of courses from which students may select to meet general education curricular requirements at the State University or University campuses of their choice. Developed in response to AB 1725 (Vasconcellos, Chapter 973, Statutes of 1988), the curriculum was adopted in 1990 by the Intersegmental Committee of the Academic Senates and implemented in the 1991-92 academic year.

Junior status - Refers to students who have entered the third year of study for a bachelor's degree. Students who have completed 60-89 semester units are considered juniors.

Lower Division - Courses designed for the first two years or within the first 59 semester units of study toward a baccalaureate degree, often taken at community college and transferred to a university. Also refers to freshman and sophomore students.

Major Preparation - This phrase refers to academic coursework taken by prospective transfer students while they are still enrolled at a community college that satisfies some of the requirements of a specific degree major at a receiving institution. Students who have decided on a receiving institution and specific program of study use "major preparation articulation" agreements, which allow them to take coursework needed for the particular major. Good counseling apprises prospective transfer students of the individual requirements of degree programs at institutions and with this knowledge students may plan a path of study that allows them to take discipline-specific courses while still enrolled in the community college. Major preparation transfer agreements are usually preferable for students rather than transfer paths that focus solely on general education courses that satisfy lower-division requirements. Meeting major preparation transfer requirements while in the community college also gives students more freedom when selecting courses once they enroll in the receiving institution and helps expedite their time-to-degree by put-ting them further along in their selected major at an earlier point.

Transfer Admission Guarantee (TAG) - This University of California program (most predominantly at UC Riverside and UC San Diego) encourages students to begin their college career at a California community college and then transfer to the UC to complete the bachelor's degree. TAG participants enter into a contract with the receiving UC campus that specifies the requirements that these students must satisfy for admission while at the community college. The program provides while at the community college. The program provides students guaranteed admission to the UC campus' college and academic term of choice, but does not necessarily for impacted majors. Each participating UC campus develops its own TAG with area community colleges and these agreements vary by campus.

Transfer Admits - A count of the actual number of transfer-eligible community college students who apply for and are accepted for enrollment in a baccalaureate institution in a given year. This term is the second in the transfer sequence of "Applicant" "Admits" and "Enrolleds." Transfer admissibility is one measure of how effective community colleges are in helping students achieve transfer eligibility. It also is one gauge of the utility of baccalaureate institution outreach efforts to potential transfer students and of the effectiveness of faculty articulation efforts and other transfer processes.

Transfer Alliance Program (TAP) - This University of California pro-gram (initiated at UCLA) gives students at participating community colleges an opportunity to transfer to participating UC campuses as juniors. Students in this program complete an honors/scholars program, at the community college. Faculty and counselors at the community colleges help students plan academic programs that meet major and general education requirements and honors/scholars certification. Students who complete the program are given priority consideration for admission to the College of Letters and Science at the UC campus. Students participating in TAP learn more about the UC through meetings with counselors, faculty, and students, including students who have transferred to the UC from the same community college. TAP students may use the UC library and participate in cultural and sports events on campus.

Transfer agreement - These are specific agreements that a community college student enters into with a CSU or UC campus, stipulating that admission as an upper division student is assured providing the student satisfies the specific requirements delineated in the agreement. These agreements typically lists the courses the student will complete at community college, with emphasis on courses required for admission, major prerequisites, and breadth requirements. Students who comply with the agreement and apply for admission on time during the appropriate filing period are guaranteed admission to a specific academic term in advance. In many cases, these agreements do not guarantee transfer into the department or major of first choice, however students with these agreements generally stand a better chance of gaining such enrollment.

Transfer agreement program - This term refers to the combination of programs, policies and practices that CSU and UC campuses use to facilitate the transfer of community college student. These TAPs are usually established between CSU/UC campuses and local area community colleges. The transfer agreement program incorporates enrollment planning and management to assure that adequate spaces exist for students who have prepared themselves for transfer. It also includes the procedures by which a community college makes students aware of the requirements that must be met to successfully transfer to one of the State's public universities.

Transfer Applicants - A count of the number of community college students who apply for transfer to a baccalaureate institution in a given year. This term is the first in the transfer sequence of "Applicant" "Admits" and "Enrolleds." The numbers of students applying for transfer serves as one measure of the effectiveness of the many community college and intersegmental initiatives designed to help community colleges students achieve transfer eligibility and pursue a baccalaureate education.

Transfer eligible - An estimate, or actual count, of the numbers of community college students who have met or exceeded transfer requirements published by the California State University, the University of California; and independent institutions. Transfer eligibility is essentially determined by requirements established by the "receiving" (baccalaureate) institutions. As such, it is driven by the efficiency of these requirements and by how effective community colleges are at preparing students to meet them. Changes in transfer eligibility also help measure the effectiveness of intersegmental transfer efforts, such as CAN and IGETC, and the utilization of ASSIST.

Transfer Enrolled - A count of the actual number of community college students who enroll in a baccalaureate institution as transfer students. This term is the third in the transfer sequence of "Applicant" "Admits" and "Enrolleds." This term also defines the numbers reported annually by the Commission as actual transfer students. Improvement in the number of transfer enrolled community college students is the State's highest policy goal in the area of transfer. As such, assessing changes in transfer "Enrolleds" is the most effective measure of the interrelation and effectiveness of all the State's transfer services, programs and processes.

Transfer Opportunity Program (TOP) - These programs operated by some University of California campuses, encourage community college students to transfer to a UC by providing support services to ease their transition. The program provides a transfer advisor who regularly visits each participating community college to work with counselors and students. The TOP advisor provides information about admission and transfer requirements, academic programs, financial aid, housing, tutoring, campus life, and other services and programs. The advisor evaluates student transcripts to assure that admission requirements. are met and that community college courses taken are transferable to the University. The TOP advisor also works with counselors and students to develop individual transfer admission agreements.

Transfer Units - Credit earned in courses that are transferable to the CSU or another college or university that a student plans to attend. All community colleges have a course numbering system for identifying transferable courses. This information is included in the community college's catalog.

Upper division - Courses designed for the third and fourth (junior and senior) years of study toward a bachelor's degree. These courses are not offered by community colleges, and they often require completion of pre-requisite courses. Also refers to junior and senior students.

Addendum 3a

1990-2000 Population Change by College Service Area
(Incorporated Cities by County)

	1990 Population (a)	2000 Population (b)	Numeric Change (b-a)	Percent Change (b-a/a)
Contra Costa County	**803,732**	**948,816**	**145,084**	**18.1**
Contra Costa College	**169,741**	**191,129**	**21,388**	**12.6**
El Cerrito	22,869	23,171	302	1.3
Hercules	16,829	19,488	2,659	15.8
Pinole	17,460	19,039	1,579	9.0
Richmond	87,425	99,216	11,791	13.5
San Pablo	25,158	30,215	5,057	20.1
Diablo Valley College	**365,231**	**409,775**	**44,544**	**12.2**
Clayton	7,317	10,762	3,445	47.1
Concord	111,348	121,780	10,432	9.4
Danville	31,306	41,715	10,409	33.2
Lafayette	23,501	23,908	407	1.7
Martinez	31,808	35,866	4,058	12.8
Moraga	15,852	16,290	438	2.8
Orinda	16,642	17,599	957	5.8
Pleasant Hill	31,585	32,837	1,252	4.0
San Ramon	35,303	44,722	9,419	26.7
Walnut Creek	60,569	64,296	3,727	6.2
Los Medanos College	**117,322**	**196,222**	**53,281**	**67.3**
Antioch	62,195	90,532	28,337	45.6
Brentwood	7,563	23,302	15,739	208.1
Oakley		25,619		
Pittsburg	47,564	56,769	9,205	19.4

* College service area totals do not add up to county total because they do not include unincorportated areas.

Source: Office of District Research, Contra Costa CCD. Based on California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000 PL94-171 report.

Addendum 3b

Contra Costa County - Population Change by Race/Ethnicity

(Incorporated and unincorporated areas)

	1990 Population (a)	**Percent of Population**	**2000 Population** (b)	**Percent of Population**	**Numeric Change** (b-a)	**Percent Change** (b-a/a)
American Indian	4,441	0.6%	3,648	0.4%	-793	-17.9
Asian/Pacific Islander	73,810	9.2%	105,838	11.2%	32,028	43.4
Black	72,799	9.1%	86,851	9.2%	14,052	19.3
Hispanic	91,282	11.4%	167,776	17.7%	76,494	83.8
White	561,400	69.8%	549,409	57.9%	-11,991	-2.1
Two or more races	n/a	n/a	32,658	3.4%	n/a	n/a
Other	n/a	n/a	2,636	0.3%	n/a	n/a
Contra Costa County	**803,732**		**948,816**		**145,084**	**18.1**

Source: Office of District Research, Contra Costa CCD. Based on California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000 PL94-171 report.

BEST COPY AVAILABLE

Addendum 3c

2000 Census Data Population by Race/Ethnicity for Incorporated Cities of Contra Costa County by College Service Area

College/City	Total Population	White	%	Hispanic	%	Black	%	Amer. Indian	%	Asian/ Pac. Is.	%	Other	%	Two or More Races	%
Contra Costa	948,816*	**549,409**	**57.9**	**167,776**	**17.7**	**86,851**	**9.2**	**3,648**	**0.4**	**105,838**	**11.2**	**2,636**	**0.3**	**32,658**	**3.4**
Contra Costa College															
El Cerrito	23,171	12,474	54.0	1,838	7.9	1,931	8.3	70	0.3	5,693	5.4	120	0.5	1,045	4.5
Hercules	19,488	4,624	23.7	2,106	10.9	3,571	18.3	29	0.1	8,352	7.9	46	0.2	760	3.9
Pinole	19,039	9,219	48.4	2,618	13.8	2,079	10.9	68	0.4	4,154	3.9	66	0.3	835	4.4
Richmond	99,216	21,081	21.2	26,319	26.5	35,279	35.6	351	0.4	12,553	11.9	400	0.4	3,233	3.3
San Pablo	30,215	4,886	16.1	13,490	44.6	5,403	17.9	125	0.4	5,036	4.8	167	0.6	1,108	3.7
Total	**191,129**	**52,284**	**27.4**	**46,371**	**24.3**	**48,263**	**25.3**	**643**	**0.3**	**35,788**	**33.8**	**799**	**0.4**	**6,981**	**3.7**
Diablo Valley College															
Clayton	10,762	9,000	83.7	681	6.3	113	1.0	16	0.1	586	0.6	30	0.3	336	3.1
Concord	121,780	74,119	60.8	26,560	21.8	3,530	2.9	580	0.5	11,815	11.2	319	0.3	4,857	4.0
Danville	41,715	34,618	82.9	1,945	4.7	375	0.9	66	0.2	3,768	3.6	68	0.2	875	2.1
Lafayette	23,908	20,123	84.1	945	4.0	129	0.5	39	0.2	1,977	1.9	33	0.1	662	2.8
Martinez	35,866	27,096	75.6	3,660	10.2	1,181	3.3	188	0.5	2,420	2.3	73	0.2	1,248	3.5
Moraga	16,290	12,760	78.3	775	4.7	161	1.0	10	0.1	2,024	1.9	41	0.3	519	3.2
Orinda	17,599	14,857	84.4	560	3.2	79	0.4	11	0.1	1,620	1.5	52	0.3	420	2.4
Pleasant Hill	32,837	25,139	76.6	2,767	8.4	493	1.5	101	0.3	3,146	3.0	72	0.2	1,124	3.4
San Ramon	44,722	32,356	72.3	3,238	7.2	842	1.9	142	0.3	6,718	6.3	131	0.3	1,295	2.9
Walnut Creek	64,296	51,834	80.6	3,851	6.0	666	1.0	148	0.2	6,059	5.7	148	0.2	1,590	2.5
Total	**409,775**	**301,902**	**73.7**	**44,982**	**11.0**	**7,569**	**1.8**	**1,301**	**0.3**	**40,128**	**37.9**	**967**	**0.2**	**12,926**	**3.2**
Los Medanos College															
Antioch	90,532	50,644	56.0	20,024	22.1	8,551	9.4	513	0.6	6,820	6.4	178	0.2	3,802	4.2
Brentwood	23,302	14,692	63.0	6,565	28.2	553	2.4	95	0.4	681	0.6	51	0.2	665	2.9
Oakley	25,619	16,469	64.2	6,399	25.0	832	3.2	151	0.6	773	0.7	42	0.2	953	3.7
Pittsburg	56,769	17,697	31.2	18,287	32.2	10,457	18.4	210	0.4	7,495	7.1	190	0.3	2,433	4.3
Total	**196,222**	**99,502**	**50.7**	**51,275**	**26.1**	**20,393**	**10.4**	**969**	**0.5**	**15,769**	**14.9**	**461**	**0.2**	**7,853**	**4.0**

* College service area totals do not add up to county total because they do not include unincorporated areas.
Source: Office of District Research, Contra Costa CCD. Based on California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000.

BEST COPY AVAILABLE

Addendum 3d

Contra Costa County - Population Forecast

Jurisdictional Boundary	1990	1990	1995	2000	2005	2010	2015	2020
Contra Costa College								
El Cerrito	22,869	22,869	23,300	23,900	24,400	24,700	25,000	25,200
Hercules	16,829	16,829	18,600	19,400	22,000	23,500	25,300	27,500
Pinole	17,460	17,460	18,100	18,700	19,400	19,700	20,000	20,300
Richmond	86,019	86,019	90,900	94,500	99,900	102,700	105,000	108,100
San Pablo	25,158	25,158	26,000	26,900	27,400	27,600	27,900	28,000
Total	**168,335**	**168,335**	**176,900**	**183,400**	**193,100**	**198,200**	**203,200**	**209,100**
Diablo Valley College								
Clayton	7,317	7,317	8,700	11,700	13,300	13,900	14,300	14,900
Concord	111,308	111,308	111,900	115,200	117,600	120,900	122,700	124,800
Danville	31,306	31,306	35,700	40,900	43,600	45,300	46,700	48,000
Lafayette	23,366	23,366	23,500	24,400	24,900	25,400	25,700	26,100
Martinez	31,810	31,810	35,100	37,000	38,900	40,300	41,100	42,100
Moraga	15,852	15,852	16,300	16,800	17,400	17,800	18,200	18,600
Orinda	16,642	16,642	16,900	17,500	18,300	18,800	19,200	19,600
Pleasant Hill	31,583	31,583	31,500	33,300	34,400	35,000	35,400	36,200
San Ramon*	35,303	35,303	39,900	45,900	54,000	63,700	71,700	80,700
Walnut Creek	60,569	60,569	62,000	64,400	65,500	67,000	68,500	70,200
Total	**357,739**	**365,056**	**381,500**	**407,100**	**427,900**	**448,100**	**463,500**	**481,200**
Los Medanos College								
Antioch	62,195	62,195	73,200	83,600	96,900	102,300	108,200	114,000
Brentwood	7,563	7,563	11,600	22,200	35,400	43,000	46,000	48,800
Oakley	18,374	18,374	22,100	29,000	31,900	33,700	35,500	37,900
Pittsburg	47,607	47,607	50,400	53,700	59,300	65,600	70,500	76,000
Total	**135,739**	**135,739**	**157,300**	**188,500**	**223,500**	**244,600**	**260,200**	**276,700**
Unincorporated Areas	134,602	134,602	149,600	162,900	177,000	185,900	198,000	202,000
Contra Costa County	**803,732**	**803,732**	**865,300**	**941,900**	**1,021,500**	**1,076,800**	**1,124,900**	**1,169,000**

*Includes Dougherty Valley.

Source: Office of District Research, Contra Costa CCD. Based on Association of Bay Area Governments, Projections 2000.

References

Community College Transfer Students

General

Adelman, C. (1999). *Answers in the Tool Box Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment.* Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.

Alfred, R. L. (2000). Assessment as a Strategic Weapon. *Community College Journal, 70*, pp 12-18.

Andrews, H. (2000). Lessons Learned from Current State and National Dual-Credit Programs. In J. C. Palmer (Ed.), *How Community Colleges Can Create Productive Collaborations with Local Schools. New Directions for Community Colleges, 111* (pp.31-39). San Francisco: Jossey-Bass.

Beachler, J. A. (1995). *Student Transfers to the California State University and University of California: 1995 Report.* Los Rios Community College District, Sacramento, CA. Office of Planning and Research.

Bender, L. W., (1990). *Spotlight on the Transfer Function: A National Study of State Policies and Practices.* America Association of Community and Junior Colleges, 1990.

The Breckenridge Experience: Reframing the Conversation about Student Success. (2000). A discussion paper at the American Association of Community Colleges, National Council of Instructional Administrators, Washington DC.

Cain, M. S. (1999). *The Community College in the Twenty-First Century. A Systems Approach.* Lanham, MD: The University Press of America, Inc.

California Postsecondary Education Commission, (1998). *A Master Plan for Higher Education, 1960-75.* April 1998.

Case, L. B. (1999). *Transfer Opportunity Program: Written Testimony to the Little Hoover Commission Public Hearing on Community Colleges.* Sacramento, CA: Los Rios Community College District.

Center for the Study of Community Colleges. (1995). *Transfer Assembly Study.* Los Angeles: Center for the Study of Community Colleges.

Cohen, A.M. (Ed.). (1994). *Relating Curriculum and Transfer, New Directions for Community Colleges,* No. 80. San Francisco: Jossey-Bass.

Cohen, A. M. & Brawer, F. B. (1996). *The American Community College.* (3rd ed.). San Francisco: Jossey-Bass.

Cohen, A. M. & Brawer, F.B. (1996). *Policies and Programs that Affect Transfer.* Washington, D.C.: American Council on Education.

Cohen, A. M. & Sanchez, J. R. (1997). *The Transfer Rate: A Model of Consistency.* Center for the Study of Community Colleges, Los Angeles, CA.

Duckwall, J. M. (1997). *JCCC Transfer Students: Their Destinations and Achievements.* Johnson County Community College, Overland Park, KS. Office of Institutional Research.

Dworkin, S. L. (1996). Persistence by 2-Year College Graduates to 4-Year Colleges and Universities. *Community College Journal of Research and Practice.* Vol. 20, No. 5, pp 445-54.

Eggleston, L. E. & Laanan, F. S. (Ed.). (2001). Making the Transition to the Senior Institution. *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 87-98. San Francisco: Jossey-Bass.

Florida Articulation Summary. (1998). Tallahassee, FL: Articulation Accountability Committee of the Articulation Coordinating Committee.

Fredrickson, J. (1998). Today's Transfer Students: Who Are They? *Community College Review*, 26(1), pp. 43-45.

Glass, J. C., Jr. & Bunn, C. E. (1998). Length of Time Required to Graduate for Community College Students Transferring to Senior Institutions. *Community College Journal of Research and Practice*, 22. pp. 239-263.

Hamilton, J. M. (1995). *Tracking Student Credit Hour Generation and Transfer Success from Gainesville College to System Senior Institutions: Fall of 1990 to Fall of 1995*. Gainesville College, GA. Office of Planning and Institutional Research.

Helm, P.K. & Cohen, A.M. (2001). Leadership Perspectives on Preparing Transfer Students. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 99-104. San Francisco: Jossey-Bass.

Hilmer, M. J. (1997). Does Community College Attendance Provide a Strategic Path to a Higher Quality Education? *Economics of Education Review*, 16 (1), pp 59-68.

Holton, J. M. (1997). *Frederick Community College Transfer Tracking System and Successful Transfer Survey, Volume III, Fall 1994-Spring 1996*. Frederick Community College, MD.

Hoyt, J.E. (1999). Promoting Student Transfer Success: Curriculum Evaluation and Student Academic Preparation. *Journal of Applied Research in the Community College*, 6(2), pp. 73-79.

Johnson-Benson, B., Geltner, P. B., & Steinberg, S.K. (2001). Transfer Readiness: A Case Study of Former Santa Monica College Students. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 77-86. San Francisco: Jossey-Bass.

Kerschner, L., (1987). *The Master Plan Reviewed: Unity, Equity, Quality, and Efficiency in California Postsecondary Education.* Commission for the Review of the Master Pan for Higher Education, Sacramento, CA, August 1987.

Kintzer, F. C. (1997). *Articulation and Transfer: Critical Contributions to Lifelong Learning.*

Knight, N. (1996). *The Community College Faculty: The Keeper of the Transfer Key?* Ph.D. dissertation, University of California, Los Angeles.

Knoell, D., (1990). *Transfer and Articulation in the 1990's.* California Postsecondary Education Commission, December 1990.

Kozeracki, C. A. & Gerdeman, R. D. (2000). *Transfer Readiness Research Project Focus Group Findings*. Unpublished Report. University of California, Los Angeles.

Kraemer, B. A. (1995). Factors Affecting Hispanic Student Transfer Behavior. *Research in Higher Education*, 36 (3), pp 303-22.

Laanan, F. S. (1996). *Building Bridges between the Segments: A Study of Community College Transfers.* Paper presented at the Annual Conference of the California Association for Institutional Research, Costa Mesa, CA.

Laanan, F. S. (1998). *Beyond Transfer Shock: A Study of Students' College Experience and Adjustment Processes at UCLA*. Unpublished doctoral dissertation. Graduate School of Education and Information Studies, University of California, Los Angeles.

Laanan, F. S. (1999). *Final Report: Transfer Readiness Research and Follow-Up Practices*. Transfer Readiness Institutionalization Project, RFA No. 97-0601. Report to the California Community Colleges Chancellor's Office, Student Services and Special Programs Division, Santa Monica, CA.

Laanan, F. S. (Ed.). (2001). Editor's Notes. *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 1-4. San Francisco: Jossey-Bass.

Laurente, Z. and Woolfork, K. (2001). *California Postsecondary Education Commission. Student Transfer in Postsecondary Education.* California Postsecondary Education Commission, December 2001.

Levin, J. S. (2001). *Globalizing the Community College: Strategies for Change in the Twenty-First Century.* New York: Palgrave.

London, H. B & Shaw, K. M. (1996). Enlarging the Transfer Paradigm: Practice and Culture in the American Community College. *Metropolitan Universities: An International Forum*, 7 (2), pp 7-14.

McCormick, A. C. & Carroll, C. D. (1997). *Transfer Behavior among Beginning Postsecondary Students: 1989-94. Postsecondary Education Descriptive Analysis Reports. Statistical Analysis Report.*

New Community College Transfer Students at California Public Universities. Factsheet FS/00-4, January 2000.

Nussbaum, T. J. (1997). *Enhancing Student Transfer: A Memorandum of Understanding Between the California Community Colleges and the University of California.* Sacramento, CA: California Community Colleges Office of the Chancellor.

Patton, M. (2001). *State-by-State Profile of Community Colleges, 2001.* Washington, DC:, American Association of Community Colleges.

Pensacola Junior College Transfer Rate Study, 1990-1996. (1996), Pensacola Junior Coll., FL. Office of Institutional Research and Effectiveness.

Porter, S. (1999). *Assessing Transfer and Native Student Performance at Four-Year Institutions.* Paper presented at the annual forum of the Association for Institutional Research, Seattle, WA.

Progress Report on the Community College Transfer Function: A Report to the Governor and the Legislature in Response to Senate Bill 121 (Chapter 1188, Statutes of 1991). Commission Report 96-4, June 1996.

Ratliff, C. and Woolfork, K. (1996). *Progress Report on the Community College Transfer Function.* A Report to the Governor and Legislature in Response to SB 121, June 1996.

Rice, S. (1996). Evaluating the "Colorado Core Transfer Program" as Public Policy. *Michigan Community College Journal: Research & Practice, Vol.* 2, No. 2, pp 63-72.

Rifkin, T. (1996). Transfer and Articulation Policies: Implications for Practice. *New Directions for Community Colleges, Vol.* 24, No. 4, pp 77-85.

Rifkin, T. (Ed.). (1996). Transfer and Articulation Polices: Implications for Practice. *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Rifkin, T. (1998). *Issues Surrounding the Community College Collegiate Function: A Synthesis of the Literature.* Washington, DC: Office of Educational Research and Improvement.

Robertson, P. F. & Frier, T. (1996). The Role of the State in Transfer and Articulation. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Roueche, J. E. & Roueche, S. D. (2000). Facing the New Millennium: Making Friends with the Future. *Community College Journal, 70*(5), pp 16-22.

Schwinn, C. & Schwinn, D. (2000). A Call to Community: The Community College Role in Comprehensive Community Development. *Community College Journal, 70*(5), pp 24-30.

Striplin, J. C. (2000). *A Review of Community College Curriculum Trends. ERIC Digest.* Los Angeles: ERIC Clearinghouse for Community Colleges.

Swing, R. L. (2000). *Transfer Student Support Programs.* Brevard, NC: Policy Center on the First Year of College, Brevard College.

Tobolowsky, B. (1998). Improving Transfer and Articulation Policies. *ERIC Clearinghouse for Community Colleges Digest.*

Toward Increased Student Success: Transfer as an Institutional Commitment. (1996). Academic Senate for California Community Colleges, Sacramento, CA.

BEST COPY AVAILABLE

Townsend, B. A. (2000). Transfer Students' Institutional Attendance Patterns: A Case Study. *College and University*, 76, pp. 21-24

Transfer and Articulation in the 1990s: California in the Larger Picture. Commission Report 90-30, December 1990.

Vaughan, G. B. (2000). *The Community College Story, (2nd Ed.)*. Washington, D.C.: Community College Press.

Washington State Board for Community and Technical Colleges, Olympia. Education Division. (1998). *Patterns Underlying the Current and Future Trends in Transfers from Community Colleges to Four-Year Public and Independent Institutions*. WA, Olympia: Research Report No. 98-7.

Transfer Students

Armstrong, W. B, & Mellissinos, M. (1994). Examining the Relationship Between Liberal Arts, Course Levels, and Transfer Rates. *New Directions for Community Colleges*, 22 (2), pp 81-91.

Blau, J. R, & Presler-Marshall, E. (1994). *Two-Year College Transfer Rates of Black-American Students*. Washington, DC: National Science Foundation.

Brawer, F. B. (1995). *Policies and Programs that Affect Transfer*. Los Angeles, CA: Center for the Study of Community Colleges.

Byrne, J. P. (1998). *Honors Programs in Community Colleges: A Review of Recent Issues and Literature*. Unpublished manuscript.

Cejda, B. (1998). Faculty Collaboration and Competency-Based Curriculum Agreements: Meaningful Links in Transfer Education. *Michigan Community College Journal: Research & Practice*, 4 (1), pp 69-78.

Cohen, A. M., & Sanchez, J. R. (1997). *The Transfer Rate: A Model of Consistency*. Los Angeles, CA: Center for the Study of Community Colleges.

Davies, T. G., & Casey, K. L. (1998). Student Perceptions of the Transfer Process: Strengths, Weaknesses, and Recommendations for Improvement. *Journal of Applied Research in the Community College*, 5 (2), pp 101-110.

Graham, S. W. & Hughes, J. C. (1994). Moving Down the Road: Community College Students' Academic Performance at the University. *Community College Journal of Research and Practice*, 18 (5), pp. 449-64.

Hilmer, M. J. (1997). Does Community College Attendance Provide a Strategic Path to a Higher Quality Education? *Economics of Education Review*, 16 (1), pp 59-68.

Kinnick, M. K., Ricks, M. F., Bach, S., Walleri, D., Stoering, J., & Tapang, B. (1998). Student Transfer between Community Colleges and a University in an Urban Environment. *Journal of Applied Research in the Community College*, 5 (2), pp 89-98.

Kraemer, B. A. (1995). Factors Affecting Hispanic Student Transfer Behavior. *Research in Higher Education*, 36 (3), pp 303-22.

Kraemer, B. A. (1996). *Meeting the Needs of Nontraditional Students: Retention and Transfer Studies*. Paper presented at the Annual Meeting of the North Central Association, Chicago, IL.

Laanan, F. S. (1996). Making the Transition: Understanding the Adjustment Process of Community College Transfer Students. *Community College Review*, 23 (4), pp 69-84.

Laanan, F. S. (1999). *Any Differences? Comparative Analysis of White and Non-White Transfer Students at a University*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Quebec, Canada.

Laden, B. V. (1994). *Defying the Odds: Academic Performance toward Transfer of Hispanic First-Year Community College Students*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

London, H. B & Shaw, K. M. (1996). Enlarging the Transfer Paradigm: Practice and Culture in the American Community College. *Metropolitan Universities: An International Forum*, 7 (2), pp 7-14.

Lowman, K. K. (1998). A Comparison of Time to B.A. Degree Attainment by Transfer and Nontransfer Status. *Visions: The Journal of Applied Research for the Florida Association of Community Colleges*, 2 (1), pp 6-13.

Minear, D. J. (1998). *Models for Understanding and Predicting the Undergraduate Educational Attainment Patterns of Public Community College Students Who Transfer with the Associate in Arts Degree into a State University System*. Doctoral Dissertation, Florida State University, Tallahassee.

Palmer, J. C., et al. (1994). *At What Point Do Community College Students Transfer to Baccalaureate-Granting Institutions? Evidence from a 13-State Study*. Washington, DC: American Council on Education, National Center for Academic Achievement and Transfer.

Piland, W. E. (1995). Community College Transfer Students Who Earn Bachelor's Degrees. *Community College Review*, 23 (3), pp 35-44.

Quanty, M. B., et al. (1996). *The Course-Based Model of Transfer Success: An Action-Oriented Research Paradigm*. Paper presented at the Annual Conference of the Southeastern Association for Community College Research, Panama City, FL.

Rendon, L. I. (1995). *Facilitating Retention and Transfer for First Generation Students in Community Colleges*. Paper presented at the New Mexico Institute, Rural Community College Initiative, Espanola, NM.

Rifkin, T. (1998). *Issues Surrounding the Community College Collegiate Function: A Synthesis of the Literature*. Washington, DC: Office of Educational Research and Improvement.

Townsend, B. K. (Ed.). (1999). Understanding the Impact of Reverse Transfer Students on Community Colleges. New Directions for Community Colleges, No. 106. *New Directions for Community Colleges*, 27 (2).

Washington State Board for Community and Technical Colleges, Olympia. Education Division. (1998). *Patterns Underlying the Current and Future Trends in Transfers from Community Colleges to Four-Year Public and Independent Institutions*. WA, Olympia: Research Report No. 98-7.

Windham, P. (1995). *The Importance of Work and Other Factors to Attrition: A Comparison of Significancy and Odds Ratios for Different Outcomes*. Paper presented at the Annual Conference of the Southeastern Association for Community College Research, Asheville, NC.

Reports of the California Postsecondary Education Commission on Transfer

Below is a compendium of reports issued by CPEC, and its predecessor the CCHE, on the subject of student transfer in California:

California College—Going Rates and Community College Transfers, 1980. Commission Report 82-2, January 1982.

Commission Comments on the Intersegmental Task Force Report, Facilitating the Transfer of Community College FOPS Students to California's Public Universities. Commission Report 85-25, April 1985.

Director's Report, April 1979: Joint Segmental Report on Increasing Opportunities for Community College Transfer Students; Legislation. Commission Report 79-5, April 1979.

Director's Report, May 1979: Change in Transfer Admission Requirements to the University of California; Recent Federal Trade Commission Rules Regulating Private Vocational Technical Schools. Commission Report 79-7, May 1979.

Enrollment Restrictions and Redirection, Diversion, and Transfer of Students. Coordinating Council Report 65-11, June 1965.

Evaluation of Community College Student Affirmative Action Transitions Projects: A Report to the Legislature in Response to Assembly Bill 1305 (1981). Commission Report 83-36, December 1983.

Facilitating the Transfer of Community College EOPS Students to California's Public Universities: Report of a Task Force Representing the California State Department of Finance, the Office of the Legislative Analyst, the California Community Colleges, the California State University, the University of California, and the California Postsecondary Education Commission, Convened in Response to Assembly Bill 3775 of 1984. Commission Report 85-19, February 1985.

Fall 1991 Community College Transfers in California's Two Public Universities. Commission Factsheet 92-10, December 7, 1992.

New Community College Transfer Students at California Public Universities. Factsheet FS/00-4, January 2000.

New Community College Transfer Students at California Public Universities. Factsheet FS/01-2, January 2001.

New Community College Transfer Students at California's Public Universities. Factsheet FS/98-3, May 1998.

New community College Transfer Students at California Public Universities. Factsheet FS/98-7, December 1998.

Plan for Obtaining Community College Transfer Student Information. Commission Report 80-7, March 1980.

Progress in Implementing the Recommendations of the Commission's 1987 Report on Strengthening Transfer and Articulation: A Staff Report to the California Postsecondary Education Commission. Commission Report 88-38, October 1988.

Progress Report on the Community College Transfer Function: A Report to the Governor and the Legislature in Response to Senate Bill 121 (Chapter 1188, Statutes of 1991). Commission Report 96-4, June 1996.

Reaffirming California's Commitment to Transfer: Recommendations for Aiding Student Transfer from the California Community Colleges to the California State University and the University of California. Commission Report 85-15, March 1985.

Report on the Implementation of a Plan for Obtaining Community College Transfer Student Information, (March 1980). Commission Report 81-11, April 1981.

Strengthening Transfer and Articulation Policies and Practices in California's Colleges and Universities: Progress Since 1985 and Suggestions for the Future. Commission Report 87-41, November 1987.

Transfer and Articulation in the 1990s: California in the Larger Picture. Commission Report 90-30, December 1990.

Update of Community College Transfer Student Statistics, Fall 1982. Commission Report 83-11, March 1983.

Update of Community College Transfer Student Statistics, Fall 1983. Commission Report 84-10, March 1984.

Update of Community College Transfer Student Statistics, Fall 1984. Commission Report 85-21, March 1985.

Update of Community College Transfer Student Statistics, Fall 1987: University of California, the California State University, and California Independent Colleges and Universities. Commission Report 88-15, March 1988.

Update of Community College Transfer Student Statistics, June 1982. Commission Report 82-24, June 1982.

Update of Community College Transfer Student Statistics, 1988-89: The University of California, the California State University, and California's Independent Colleges and Universities. Commission Report 89-23, August 1989.

Update of Community College Transfer Statistics, University of California and the California State University, Fall 1985. Commission Report 86-11, April 1986.

BEST COPY AVAILABLE

Update of Community College Transfer Statistics, University of California and the California State University, Fall 1986. Commission Report 87-22, April 27.

Updated Community College Transfer Student Statistics, Fall 1990 and Full-Year 1989-90: A Staff Report to the California Postsecondary Education Commission. Commission Report 91-11, April 1991.

Views from the Field on Community College Transfer: Testimony of the Ad Hoc Committee on Community College Transfer, California Postsecondary Education Commission. Commission Report 84-20, June 1984.

Education Reform in the Community College

Ames, D. M. (1996). *ABC--Me Teacher, You Student.* Paper presented at the Annual Meeting of the Academy of Legal Studies in Business' Pacific Northwest Region, Vancouver, British Columbia, Canada.

Cross, K. P. (1995). *Educating for the 21st Century.* Paper presented at "Leadership 2000," the Annual International Conference of the League for Innovation in the Community College and the Community College Leadership Program, San Francisco, CA.

Doucette, D. (1997). What Will Community Colleges Do When Microsoft and Disney Deliver High-Quality, Accredited Higher Education and Training to the Businesses and Homes of Most Americans? In: *Walking the Tightrope: The Balance between Innovation and Leadership.* Proceedings of the Annual International Conference of the Chair Academy, Reno, NV.

Harris, Z. M. & Kayes, P. (1995). *Multicultural and International Challenges to the Community College: A Model for College-Wide Proactive Response.* Paper presented at the Annual Convention of the American Association of Community Colleges, Minneapolis, MN.

Jackman, A. (1996). *Assessment and Educational Reform: Doing More than Polishing Brass on the Titanic, a Call for Discussion.* Paper presented to the Evaluation Strategies Working Group of the National Institute for Science Education at the Wisconsin Center for Education Research.

Jones, R. T. (1996). The New Workplace & Lifelong Learning. *Community College Journal.* Vo. 67, No. 2, pp 21-23.

Kesler, Rosemary; & et al. (1996). So They Are Resistant to Change? Strategies for Moving an Immovable Object. In: *The Olympics of Leadership: Overcoming Obstacles, Balancing Skills, Taking Risks.* Proceedings of the Annual International Conference of the National Community College Chair Academy, Phoenix, AZ.

LeMon, R. E. & Pitter, G. W. (1996). *Standardizing across Institutions: Now That We All Look Alike, What Do We Look Like?* Florida State Board of Regents, Tallahassee, FL.

O'Banion, T. Community Colleges Lead a Learning Revolution. *Educational Record,* Vol. 76, No. 4, pp 23-27.

Price, L., et al. *Workforce Development and Preparation Initiatives: Implications for the California Community Colleges.* California Community Colleges, Sacramento. Academic Senate.

Raby, R. L. (1995). *Internationalizing the Curriculum: Ideals vs. Reality.* Paper presented at the Annual Conference of the Association of California Community College Administrators, San Jose, CA.

Shipley, D. (1995). *Transforming Community Colleges Using a Learning Outcomes Approach.* Paper presented at a workshop sponsored by the Advanced Education Council of British Columbia and the Centre for Curriculum and Professional Development, Richmond, British Columbia, Canada.

Smith, R. W. (1995). *Tomorrow's Community College.* Life Press, Inc., Cranford, NJ.

Travis, J. (1995). *Community Cores: The Future for the Community College Campus.* Roundtable presentation delivered at the Annual Convention of the American Association of Community Colleges, Minneapolis, MN.

Wangen, N. R. (1995). The Minnesota Model for General Education. *New Directions for Community Colleges,* Vol. 23. No. 4, pp 53-65.

Future Trends in Community Colleges

Andrews, H. (2000). Lessons Learned from Current State and National Dual-Credit Programs. In J. C. Palmer (Ed.), *How Community Colleges Can Create Productive Collaborations with Local Schools. New Directions for Community Colleges, 111* (pp.31-39). San Francisco: Jossey-Bass.

Blau, J. R., McVeigh, R., & Land, K. C. (2000). The Expansion of Two-Year Colleges: A Dynamic, Multi Level Model. *Community College Journal of Research and Practice, 24*, pp 127-143.

The Breckenridge Experience: Reframing the Conversation about Student Success. (2000). A discussion paper.at the American Association of Community Colleges, National Council of Instructional Administrators, Washington DC.

Brewster, D. (2000). The Use of Part-Time Faculty in the Community College. *Inquiry, 5*, pp 66-76.

Carnevale, A. P. & Desrochers, D. M. (2001). *Help Wanted...Credentials Required: Community Colleges in the Knowledge Economy.* Washington, DC: Community College Press.

Cohen, A. M., & Sanchez, J. R. (1997). *The Transfer Rate: A Model of Consistency.* Los Angeles, CA: Center for the Study of Community Colleges.

Coley, R. J. (2000). *The American Community College Turns 100: A Look at its Students, Programs, and Prospects. Policy Information Report.* Princeton, NJ: Educational Testing Service.

Davies, T. G., & Casey, K. L. (1998). Student Perceptions of the Transfer Process: Strengths, Weaknesses, and Recommendations for Improvement. *Journal of Applied Research in the Community College*, 5 (2), pp 101-110.

Delmonico, M. J. (2000). *Is Treating Students as Customers the Right Move for Community Colleges?* Unpublished manuscript, Saint Petersburg Junior College. FL.

Elsner, P. A. (2000, April). *Rival Views of Technology: Leadership Lessons for an Uncertain Future.* Proceedings of the Technological Education and National Development Conference, "Crossroads of the New Millennium", Abu Dhabi, United Arab Emirates.

Environmental Scan, 2001. (2001). Unpublished manuscript, Association of Colleges of Applied Arts and Technology of Ontario, North York.

Falk, I. (1999). The Convergence of Vocational and Adult Education in Learning Communities. *Community College Journal of Research and Practice, 23*, pp 697-716.

Gleazer, E. J., Jr. (2000). Reflections on Values, Vision, and Vitality: Perspectives for the 21st Century. *Community College Journal of Research and Practice, 24*, pp 7-18.

Harper, B., Hedberg, J., Bennett, S., & Lockyer, L. (2000). *The On-Line Experience: The State of Australian On-Line Education and Training Practices. Review of Research.* Leasbrook, Australia: National Centre for Vocational Education Research.

Heelan, C., Redwine, J. A., & Black, A. (2000). Laboratory for a New Form of Democracy. *Community College Journal, 70*(6), pp 38-43.

Knutzen, J. (Comp.) (2000). *Focus on the Future: Environmental Scanning at Columbia Basin College.* Unpublished manuscript.

Kruger, K. (2000). Using Information Technology to Create Communities of Learners. In B. Jocaby (Ed.), *Involving Commuter Students in Learning. New Directions for Higher Education, 109* (pp. 59-70). San Francisco: Jossey-Bass.

Lamkin, A. (2000). *International Students at Community Colleges. ERIC Digest.* Los Angeles: ERIC Clearinghouse for Community Colleges

Lee, M. M. (1999). *A Formula for Writing Environmental Scans for Community Colleges.* Unpublished manuscript, Valhalla, NY, Westchester Community College, Office of Institutional Research.

Levin, J. S. (2000, April). *The Revised Institution: The Community College Mission at the End of the 20th Century.* Paper presented at the American Educational Research Association, New Orleans, AL.

Levin, J. S. (2001). *Globalizing the Community College: Strategies for Change in the Twenty-First Century.* New York: Palgrave.

McPherson, M., & Schapiro, M. O. (2000). Financing Lifelong Learning, Trends and Patterns of Participation and Financing in US Higher Education. *Higher Education Management, 12*(2), pp 131-156.

Parsons, M. H. (2000). *Facilitating Learner-Centered Instruction: Technology, Simulation, and Scans.* Paper presented at the Community College Showcase, Ocean City, MD

Patton, M. (2001). *State-by-State Profile of Community Colleges, 2001.* Washington, DC:, American Association of Community Colleges.

Prentice, M. & Garcia, R. M. (2000). Service Learning: The Next Generation in Education. *Community College Journal of Research and Practice, 24,* pp 19-26.

Rosenfeld, S. A. (Ed.). (2000). *Learning Now: Skills for an Information Economy.* Washington, DC:. Community College Press.

Roueche, J. E. & Roueche, S. D. (2000). Facing the New Millennium: Making Friends with the Future. *Community College Journal, 70*(5), pp 16-22.

Ryland, J. N. (2000). *Technology and the Future of the Community College. New Expeditions: Charging the Second Century of Community Colleges. Issues Paper No. 10.* Annapolis Junction, MD: Community College Press.

Schwinn, C. & Schwinn, D. (2000). A Call to Community: The Community College Role in Comprehensive Community Development. *Community College Journal, 70*(5), pp 24-30.

Shults, C. (2000). *The Critical Impact of Impending Retirements on Community College.* Washington, DC: American Association of Community Colleges.

Skills Certificates Signal Competencies in a Demand-Driven Economy. (2000). *WorkAmerica, 17*(3).

Small, Mid-Sized Businesses Power Up with Workforce Training. (2000). *WorkAmerica, 17*(7), pp 1,4-6.

The State of Basic Skills Instruction in California Community Colleges. (2000). Sacramento, CA: Academic Senate for California Community Colleges

Striplin, J. C. (2000). *A Review of Community College Curriculum Trends. ERIC Digest.* Los Angeles: ERIC Clearinghouse for Community Colleges.

Improving Transfer and Articulation Policies

Cohen, A. M. (1996). Orderly Thinking About a Chaotic System. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Kintzer, F. C. (1996). A Historical and Futuristic Perspective of Articulation and Transfer in the United States. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Knoell, D. M. (1996). Moving Toward Collaboration in Transfer and Articulation. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Laanan, F. S. & Sanchez, J. R. (1996). New Ways of Conceptualizing Transfer Rate Definitions. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Palmer, J. C. (1996). Transfer as a Function of Interinstitutional Faculty Deliberations. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Rifkin, T. (Ed.). (1996). Transfer and Articulation Polices: Implications for Practice. *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Robertson, P. F. & Frier, T. (1996). The Role of the State in Transfer and Articulation. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Spicer, S. L. & Armstrong, W. B. (1996). Transfer: The Elusive Denominator. In T. Rifkin (Ed.), *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96.

Transfer Readiness: A Case Study

Astin, A. W. (1993). *What Matters in College? Four Critical Years Revisited.* San Francisco: Jossey-Bass.

Baker, R. W. & Siryk, B. (1984). Measuring Adjustment to College. *Journal of Counseling Psychology*, 31, pp. 179-189.

Baker, R. W. & Siryk, B. (1986). Exploratory Intervention with a Scale Measuring Adjustment to College. *Journal of Counseling Psychology*, 33, pp. 31-38.

Laanan, F. S. (1995). *Making the Transition: An Exploratory Study of Academic Achievement, Involvement, Adjustment, and Satisfaction of Transfer Students at UCLA.* Report presented to the Dean of the College of Letters and Science, University of California, Los Angeles.

Laanan, F. S. (1999). *Final Report: Transfer Readiness Research and Follow-Up Practices.* Transfer Readiness Institutionalization Project, RFA No. 97-0601. Report to the California Community Colleges Chancellor's Office, Student Services and Special Programs Division, Santa Monica, CA.

Pace, C. R. (1990). *College Student Experiences Questionnaire.* (3rd Ed.). Los Angeles: Center for the Study of Evaluation, University of California.

Making the Transition to the Senior Institution

Ackermann, S. P. (1991). The Benefits of Summer Bridge Programs for Underrepresented and Low-Income Transfer Students. *Community/Junior College Quarterly of Research and Practice*, 15, pp. 211-224.

Carpenter, K. (1991). Serving the Transfer Needs of International Students: Cooperation Between Two-Year and Four-Year Schools. *College and University*, 6(3), pp. 63-66.

Cejda, B. D. (1994). Reducing Transfer Shock Through Faculty Collaboration: A Case Study. *Community College Journal of Research and Practice*, 18, pp. 189-199.

Chenoweth, K. (1998). The New Faces of Vassar: This Seven Sister College Has Tapped into an Often Overlooked Resource of Minority Undergraduates—Transfer Students. *Black Issues in Higher Education*, 14(26), pp. 22-23.

Cohen, A. (1993). *Analyzing Community College Student Transfer Rates.* Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

Fredrickson, J. (1998). Today's Transfer Students: Who Are They? *Community College Review*, 26(1), pp. 43-45.

Knoell, D. M. & Medsker, L. L. (1965). *From Junior to Senior College: A National Study of the Transfer Student.* Washington, D.C.: American Council of Education.

Phillippe, K. & Patton, M. (1999). *National Profile of Community Colleges: Trends and Statistics.* (3rd Ed.). Washington, D.C.: Community College Press, American Association of Community Colleges.

Rendon, L. I. & Nora, A. (1998). Hispanic Students: Stopping the Leaks in the Pipeline. *Educational Record*, 69(1), pp. 79-85.

Sandeen, A. & Goodale, T. (1976). *The Transfer Student: An Action Agenda for Higher Education.* Gainesville, FL: Institute of Higher Education, University of Florida.

Swing, R. L. (2000). *Transfer Student Support Programs.* Brevard, NC: Policy Center on the First Year of College, Brevard College.

Townsend, B. K. (1995). Community College Transfer Students: A Case Study of Survival. *Review of Higher Education*, 18, pp. 175-193.

University of Arkansas, Office for Non-Traditional Students. Online. Available: http://www.uark.edu/admin/onts.

The Influence of Race and Ethnicity on Access to Postsecondary Education and the College Experience

California Community Colleges. (1993). *The California Middle College High School Program.* Discussed as Agenda Item 7 at a meeting of the Board of Governors of the California Community Colleges, Sacramento, CA.

Center for the Study of Community Colleges. (1995). *Transfer Assembly Study.* Los Angeles: Center for the Study of Community Colleges.

Clark, B. R. (1960). The Cooling-Out Function in Higher Education. *The American Journal of Sociology*, 65(6), pp 569-576.

Dougherty, K. J. (1994). *The Contradictory College: The Conflicting College: The Conflicting Origins, Impacts, and Futures of the Community College.* Albany: State University of New York Press.

Isaacs, H. R. (1975). Basic Group Identity: The Idols of the Tribe. In N. Glazer and D.P. Moynihan (Eds.), *Ethnicity: Theory and Experience.* Cambridge: Harvard University Press.

Jones, Enid B., Ed. (1992). *Lessons for the Future: Minorities in Math, Science, and Engineering at Community Colleges.*.Report of an American Association of Community Colleges Roundtable, Washington, D.C.

Kanter, M. J. (1990). *An Examination of Demographic, Institutional, and Assessment Factors Affecting Access to Higher Education for Underrepresented Students in the California Community Colleges.* Paper Presented at the Annual Meeting of the American Educational Research Association, Boston, MA.

Karabel, J. (1972). Community Colleges and Social Stratification: Submerged Class Conflict in American Higher Education. *Harvard Educational Review*, 42, pp 521-562.

Kee, A. M., & Mahoney, J. R. (Eds.) (1995). *Multicultural Strategies for Community Colleges.* Washington, D.C.: American Association of Community Colleges.

Laurel, E. G., et al. (1990). Employing Peer Coaching to Support Teachers. *Teacher Education and Practice*, Vol. 6, No.2.

Rendon, L. I. & Valadez, J. R. (1993). Qualitative Indicators of Hispanic Student Transfer. *Community College Review*, 20(4) pp 27-37.

Richardson, R. C., Jr. (1990). *Responding to Student Diversity: A Community College Perspective.* National Center for Postsecondary Governance and Finance and the Research Center at Arizona State University.

Stolar, S. M. & Colwes, J. (1992). *Enhancing Minority Male Enrollment: Students as Mentors*. Vineland,NJ: Cumberland County College.

Ward, B. (1990). *Report on George Brown College Multicultural Demonstration Project* Toronto, Ontario: George Brown College.

Williams, C. (1990). Broadening Access for Black Students. *Community, Technical and Junior College Journal*, 60(2), pp 14-17.

Institutional Research, Planning and Evaluation in the Community College

Alfred, R. L. (2000). Assessment as a Strategic Weapon. *Community College Journal, 70*, pp 12-18.

The Breckenridge Experience: Reframing the Conversation about Student Success. A Discussion Paper. (2000). Washington, DC: American Association of Community Colleges.

Cain, M. S. (1999). *The Community College in the Twenty-First Century. A Systems Approach.* Lanham, MD: The University Press of America, Inc.

Campbell, D. F. & Leverty, L. H. (1999). Future Concerns—Key Values for Community Colleges. *Community College Journal, 70*, pp 18-24.

Coley, R. J. (2000). *The American Community College Turns 100: A Look at Its Students, Programs, and Prospects. Policy Information Report.* Princeton, NJ: Educational Testing Service.

Eickmeyer, B., Hill, S. & Kozak, K. (2000). *Assessment Program Technical Progress Report, 1998-1999.* Unpublished manuscript. Coconino Community College, Flagstaff, AZ.

Eller, R., Martinez, R., Pace, C., Pavel, M., & Barnett, L. (1999). *Rural Community College Initiative IV: Capacity for Leading Institutional and Community Change. AACC [American Association of Community Colleges] project brief.* Washington, DC: American Association of Community Colleges.

High, C. F. (1999). *Measuring Success in Texas Urban Community Colleges: What Should the Indicators Be?* Unpublished manuscript. Houston Community College System, Houston, TX.

Institutional Effectiveness: A Model for Planning, Assessment & Validation. (1999). Unpublished manuscript. Truckee Meadows Community College, Sparks, NV.

Johnston, G. H. & Kristovich, S. A. R. (2000). Community College Alchemists: Turning Data into Information. In D. Robillard, Jr. (Ed.), *Dimensions of Managing Academic Affairs in the Community College. New directions for Community Colleges, 109*, pp 63-73. San Francisco: Jossey-Bass.

Mendocino College 2000 Summary Report. (2000). Unpublished manuscript. Mendocino College, Ukiah, CA.

Moore, N. (1999). *A New Approach to Including Student Intent Information in Performance Measures.* Paper presented at the Rocky Mountain Association for Institutional Research Annual Conference, Las Vegas, NV.

Nespoli, L. A. & Gilroy, H. A. (1999). New Jersey's Community Colleges: An Experiment in "Coordinated Autonomy." *Community College Journal of Research and Practice, 23*, pp 269-280.

New Beginnings, 2000: July 2000-June 2003. A Three-Year Business Plan for Lethbridge Community College. (2000). Unpublished manuscript. Lethbridge Community College, Alberta, Canada.

Pascarella, E. T. (1999). New Studies Track Community College Effects on Students. *Community College Journal, 69*, pp 8-14.

Pecorino, P. & Dozier, S. B. (2000). *Community Colleges: Public Failure and Private Success.* Unpublished manuscript.

BEST COPY AVAILABLE

Peterman, D. S. & Kozeracki, C. A. (1999). Sources and Information about Urban Community Colleges. In R.C. Bowen & G. H. Muller (Eds.), *Gateways to Democracy: Six Urban Community College Systems. New Directions for Community Colleges, 107*, pp 85-94. San Francisco: Jossey-Bass.

Roueche, J. E. & Roueche, S. D. (2000). Facing the New Millennium: Making Friends with the Future. *Community College Journal, 70*, pp 16-22.

Salem Community College's 1999-2002 Strategic Plan Authoring & Implementation Strategy. (1999). Unpublished manuscript. Salem Community College, Penns Grove, NJ.

Schwinn, C. & Schwinn, D. (2000). A Call to Community: The Community College Role in Comprehensive Community Development. *Community College Journal, 70*, pp 24-30.

Spangler, M. (1999). *Los Angeles City College: State of the College, Spring 1999*. Unpublished manuscript. Los Angeles City College, Los Angeles, CA.

Windham, P. (2000). *Accountability in the Year 2000*. Unpublished manuscript. Florida State Board of Community Colleges, Tallahassee, FL.

Yellow Bird, D. (1999). Turtle Mountain Faculty Helps Build Model Assessment Tool. *Tribal College, 10* (2), pp 10-13.

Trends and Issues in Transfer

Eggleston, L. E. & Laanan, F. S. (Ed.). (2001). Making the Transition to the Senior Institution. *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 87-98. San Francisco: Jossey-Bass.

Helm, P.K. & Cohen, A.M. (2001). Leadership Perspectives on Preparing Transfer Students. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 99-104. San Francisco: Jossey-Bass.

Johnson-Benson, B., Geltner, P. B., & Steinberg, S. K. (2001). Transfer Readiness: A Case Study of Former Santa Monica College Students. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 77-86. San Francisco: Jossey-Bass.

Kane, H. R. (2001). Honors Programs: A Case Study of Transfer Preparation. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 25-38. San Francisco: Jossey-Bass.

Kozeracki, C. A. (2001). Studying Transfer Students: Designs and Methodological Challenges. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 77-86. San Francisco: Jossey-Bass.

Laanan, F. S. (Ed.). (2001). Editor's Notes. *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 1-4. San Francisco: Jossey-Bass.

Lee, W. Y. (2001). Toward a More Perfect Union: Reflecting on Trends and Issues for Enhancing the Academic Performance of Minority Transfer Students. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 39-44. San Francisco: Jossey-Bass.

Zamani, E. M. (2001). Institutional Responses to Barriers to the Transfer Process. In F.S. Laanan (Ed.), *Transfer Students: Trends and Issues, New Directions for Community Colleges*, No. 114. pp. 15-24. San Francisco: Jossey-Bass.

Transfer Student Adjustment

Astin, A. W. (1984). Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Personnel*, 25. pp. 297-308.

Astin, A. W. (1989). *What Matters in College? Four Critical Years Revisited*. San Francisco: Jossey-Bass.

Attinasi, L. S., Jr. (1989). Getting In: Mexican Americans' Perceptions of University Attendance and the Implications for Freshman Year Persistence. *Journal of Higher Education*, 60. pp. 247-277.

Bean, J. P. & Metzner, B. S. (1985). A Conceptual Model of Nontraditional Undergraduate Student Attrition. *Review of Educational Research*, 55. pp. 485-539.

Bennett, C. & Okinaka, A. M. (1990). Factors Related to Persistence Among Asian, Black, Hispanic, and White Undergraduates at a Predominantly White University: Comparison between First- and Fourth-Year Cohorts. *Urban Review*, 22. pp. 33-60.

Chartrand, J. M. (1992). An Empirical Test of a Model of Nontraditional Student Adjustment. *Journal of Counseling Psychology*, No. 39. pp. 193-202.

Chickering, A. W. & Reisser, L. (1993). *Education and Identity*. (2nd ed.). San Francisco: Jossey-Bass.

Cohen, A. M. & Brawer, F. B. (1982). *The American Community College*. San Francisco: Jossey-Bass.

Cohen, A. M. & Brawer, F. B. (1989). *The American Community College*. (2nd ed.). San Francisco: Jossey-Bass.

Cohen, A. M. & Brawer, F. B. (1996). *The American Community College*. (3rd ed.). San Francisco: Jossey-Bass.

Cross, K. P. (1968). *The Junior College Student: A Research Description*. Princeton, NJ: Educational Testing Service.

Diaz, P. (1992). Effects of Transfer on Academic Performance of Community College Students at the Four-Year Institution. *Community College Journal of Research and Practice*, 16. pp. 279-291.

Graham, S. W. & Dallam, J. (1986). Academic Probation as a Measure of Performance: Contrasting Transfer Students to Native Students. *Community/Junior College Quarterly of Research and Practice*, 10, pp. 23-24.

Hills, J. (1965). Transfer Shock: The Academic Performance of the Junior College Transfer. *Journal of Experimental Education*, 33. pp. 201-216.

Holshan, C. K., Green J. L. & Kelley, H. P. (1983). A Six-Year Longitudinal Analysis of Transfer Student Performance and Retention. *Journal of College Student Personnel*, 24. pp. 305-310.

Hughes, J. A. & Graham, S. W. (1992). Academic Performance and Background Characteristics Among Community College Transfer Students. *Community/Junior College Quarterly of Research and Practice*, 16. pp. 35-46.

Hurtado, S. (1992). The Campus Racial Climate: Contexts for Conflict. *Journal of Higher Education*, 63. pp. 539-569.

Hurtado, S., Carter D. F. & Spuler, A. (1996). Latino Student Transition to College Assessing Difficulties and Factors in Successful College Adjustment. *Research in Higher Education*, 37. pp. 135-157.

Johnson, N. T. (1987). Academic Factors That Affect Transfer Student Persistence. *Journal of College Personnel*, 28. pp. 323-329.

Keeley, E. J. & House, J. D. (1993). *Transfer Shock Revisited: A Longitudinal Study of Transfer Academic Performance*. Paper presented at the annual forum of the Association for Institutional Research, Chicago.

Laanan, F. S. (1998). *Beyond Transfer Shock: A Study of Students' College Experience and Adjustment Processes at UCLA*. Unpublished doctoral dissertation. Graduate School of Education and Information Studies, University of California, Los Angeles.

Nolan, E. J. & Hall, D. L. (1978). Academic Performance of the Community College Transfer Student: A Five-Year Follow-Up Study. *Journal of College Student Personnel*, 19. pp. 543-548.

Pace, C. R. (1984). *Measuring the Quality of College Student Experiences*. Los Angeles: Center for the Study of Evaluation, University of California.

Pace, C. R. (1992). *College Student Experiences Questionnaire: Norms for the Third Edition, 1990.* Los Angeles: Center for the Study of Evaluation, University of California.

Pascarella, E., Smart, J. & Ethington, C. (1986). Long-Term Persistence of Two-Year College Students. *Research in Higher Education*, 24. pp. 47-71.

Phlegar, A. G., Andrew, L. D. & McLaughlin, G. W. (1981). Explaining the Academic Performance of Community College Students Who Transfer to a Senior Institution. *Research in Higher Education*, 15. pp. 99-108.

Richardson, R. C., Jr. & Doucette, D. S. (1980). *Persistence, Performance, and Degree Achievement of Arizona's Community College Transfers in Arizona's Public Universities.* (ED 197 785).

Smedley, B. D., Myers, H. F. & Harrell, S. P. (1993). Minority-Status Stresses and the College Adjustment of Ethnic Minority Freshmen. *Journal of Higher Education*, 64. pp. 434-452.

Thornton, J. S., Jr. (1975). *The Community Junior College (3rd Ed.).* New York: Wiley.

Tinto, V. (1975). Dropout from Higher Education: A Theoretical Synthesis of Recent Research. *Review of Higher Education*, 63. pp. 603-618.

Tinto, V. (1987). *Leaving College: Rethinking the Causes and Cures of Student Attrition.* Chicago: University of Chicago Press.

Townsend, B. K. (1993). *University Practices That Hinder the Academic Success of Community College Transfer Students.* Paper presented at the annual meeting of the Association for the Study of Higher Education, Pittsburg, PA.

Townsend, B. K. (1995). Community College Transfer Students: A Case Study of Survival. *Review of Higher Education*, 18. pp. 175-193.

Vaughan, G. B. (2000). *The Community College Story, (2nd Ed.).* Washington, D.C.: Community College Press.

Webb, S. (1971). Estimated Effects of Four Factors on Academic Performance Before and After Transfer. *Journal of Experimental Education*, 39. pp. 78-84.

Williams, R. (1973). Transfer Shock as Seen from a Student's Point of View. *College and University*, 48. pp. 320-321.

Institutional Responses to Barriers to the Transfer Process

Bender, L. W. (1990). *Spotlight on the Transfer Function: A National Study of State Policies and Practices.* Washington, D.C.: American Association of Community and Junior Colleges.

Bender, L. W. (1991). Minority Transfer: A National and State Legislative Perspective. In D. Angel and A. Barrea (Eds.) *Rekindling Minority Enrollment, New Directions for Community Colleges*, No. 74. San Francisco: Jossey-Bass.

Brint, S. & Karabel, J. (1989). American Education, Meritocratic Ideology, and the Legitimization of Inequality: The Community College and the Problem of American Exceptionalism. *Higher Education*, 18. pp. 725-735.

Case, L. B. (1999). *Transfer Opportunity Program: Written Testimony to the Little Hoover Commission Public Hearing on Community Colleges.* Sacramento, CA: Los Rios Community College District.

Cejda, B. D. (1997). An Examination of Transfer Shock in Academic Disciplines. *Community College Journal of Research and Practice*, 21. pp. 279-288.

Cohen, A. M. (1988). Degree Achievement by Minorities in Community Colleges. *Review of Higher Education*, 11. pp. 383-402.

College Services Annual Report, 1997-1998. (1998). Glendale, CA: Glendale Community College

Community College Programs and Services for Special Populations and Underrepresented Groups, Fiscal Year 1995. (1996). Springfield, IL: Illinois Community College Board.

Dougherty, K. J. (1992). Community Colleges and Baccalaureate Attainment. *Journal of Higher Education*, 63. pp. 188-214.

Glass, J. C., Jr. & Bunn, C. E. (1998). Length of Time Required to Graduate for Community College Students Transferring to Senior Institutions. *Community College Journal of Research and Practice*, 22. pp. 239-263.

Haralson, M., Jr. (1996). *Survival Factors for Black Students on Predominantly White Campuses.* Paper presented at the annual meeting of the National Association of Student Personnel Administrators. Atlanta, GA.

Hunter, R. & Sheldon, M. S. (1980). *Statewide Longitudinal Study: Report on Academic Year 1979-80, Part 3: Fall Results.* Woodland Hills, CA: Los Angeles Pierce College.

Keener, B. J. (1994). Capturing the Community College Market. *Currents*, 20(5). Pp. 38-43.

McDonough, P.M. (1997). *Choosing Colleges: How Social Class and Schools Structure Opportunity.* Albany, NY: State University of New York Press.

McGrath, D. & Van Buskirk, W. (1998). *Si, Se Puede = Yes, It Can Be Done: The Summer Scholars Transfer Institute Collaborating to Promote Access and Achievement.* New York National Center for Urban Partnerships.

Memphis Center for Urban Partnerships. (2001). Online. Available: http//www.people.Memphis.edu/~coe_mcup.

Nussbaum, T. J. (1997). *Enhancing Student Transfer: A Memorandum of Understanding Between the California Community Colleges and the University of California.* Sacramento, CA: California Community Colleges Office of the Chancellor.

Oakton Community College Annual Report to the Community, Fiscal Year 1997. (1997). Des Plaines, IL: Oakton Community College.

Palmer, J. (1987). Bolstering the Community College Transfer Function: An ERIC Review. *Community College Review*, 14(3). Pp. 53-63

Pascarella, E. T., et al. (1988). Does Work Inhibit Cognitive Development During College? *Educational Evaluation and Policy Analysis*, 20. pp. 75-93.

Pincus, F. & Archer, E. (1989). *Bridges to Opportunity: Are Community Colleges Meeting the Transfer Needs of Minority Students?* New York: Academy for Educational Development and College Entrance Examination Board.

Prager, C. (1992). Accreditation and Transfer: Mitigating Elitism. In B. W. Dziech and W. R. Filter (Eds.) *Prisoners of Elitism: The Community College's Struggle for Stature, New Directions for Community Colleges*, No. 78. San Francisco: Jossey-Bass.

Rice, R. L. (1990). Commuter Students. In M. L. Upgraft and J. N. Gardner (Eds.) *The Freshman-Year Experience: Helping Students Survive and Succeed in College.* San Francisco: Jossey-Bass.

Richardson, R. C. & Skinner, E. F. (1992). Helping First-Generation Minority Students Achieve Degrees. In L. S. Zwerling and H. B. London (Eds.) *First-Generation Students: Confronting the Cultural Issues, New Directions for Community Colleges*, No. 80. San Francisco: Jossey-Boss.

Stewart, D. M. (1988). Overcoming the Barriers to Successful Participation by Minorities. *Review of Higher Education*, 11. pp. 329-336.

Tobolowsky, B. (1998). Improving Transfer and Articulation Policies. *ERIC Clearinghouse for Community Colleges Digest.*

Townsend, B. A. (2000). Transfer Students' Institutional Attendance Patterns: A Case Study. *College and University*, 76, pp. 21-24

Velez, W. (1985). Finishing College: The Effects of College Type. *Sociology of Education*, 58. pp. 191-200.

Zamani, E. M. Affirmative Action Attitudes of African American Community College Students: The Impact of Educational Aspirations, Self-Interest, and Racial Affect. In C. C. Yeakey, R. D. Henderson, & M. Shujaa (Eds.) *Research on African American Education*. Vol. 1. Greenwich, CT: Information Age, forthcoming.

Toward a More Perfect Union

Digest of Education Statistics, 2000. (2000). Washington, D.C.: National Center for Education Statistics, U.S. Department of Education.

Hernandez, M., Isaacs, M. R., Nesman, T. & Burns, D. (1998). Perspectives on Culturally Competent Systems of Care. In M. Hernandez and M. R. Isaacs (Eds.) *Promoting Cultural Competence in Children's Mental Health Services*. Baltimore, MD: Paul H. Brookes.

Nettles, M. T. & Perna, L. W. (1997). *The African American Education Data Book, Vol. 1: Higher and Adult Education*. Frederick D. Patterson Research Institute College Fund/UNCF.

Transfer Between Oregon Community Colleges and University

A Plan for Course and Credit Transfer Between Oregon Community Colleges and Oregon University System Institutions. (1999). Eugene, OR: Oregon University System.

Adelman, C. (1998). What Proportion of College Students Earn a Degree? *AAHE Bulletin*, pp. 7-9.

Adelman, C. (1999). *Answers in the Tool Box Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.

Arnold, J. C. (2000). *Students Who Transfer Between Oregon Community Colleges and Oregon University System Institutions: What the Data Say*. Report submitted to the Joint Boards of Education by the Joint Boards Articulation Commission. Eugene, OR: Oregon University System.

Bach, S. K., et al. (1999). *Case Studies in Transfer Attendance Within an Urban Postsecondary Environment*. Paper presented at the 39th annual forum of the Association of Institutional Research, Seattle, WA.

de los Santos, A. G., Jr. & Wright, I. (1990). Maricopa's Swirling Students. *Community, Technical, and Junior College Journal*, 60(6). pp. 32-34.

Grubb, W. N. (1991). The Decline of Community College Transfer Rates. *Journal of Higher Education*, 62. pp. 194-222.

Studying Transfer Students: Designs and Methodological Challenges

Ackerman, S. P. (1990). *A Comparison of a Sub-Population of Santa Monica College Students to Other Community College Students in the Southern California Area: An Analysis of the Results from the Community College Student Experiences Questionnaire*. Santa Monica, CA: Santa Monica College.

Adams, J. (1999). Learning from Transfer Data Exchange. *Michigan Community College Journal: Research and Practice*, 5(2). pp. 53-67.

Alexander, H. (1996). *Graduate Follow-Up Survey, FY94*. Research Brief RB96-14. Largo, MD: Prince George's Community College.

Allard, S. (1992). *Transfer Student Follow-Up: Washington State University Students Reflect upon Big Bend Community College Education*. Moses Lake, WA: Big Bend Community College.

Anglin, L. W. Davis, J. W. & Mooradian, P. W. (1995). Do Transfer Students Graduate? A Comparative Study of Transfer Students and Native University Students. *Community College Journal of Research and Practice*, 19. pp 321-330.

Arnold, C. L. & Ugale, R. (1996). *Student Outcomes Report: The Latest Numbers and Recent Trends in Student Success, Withdrawal, Persistence, Degrees/Certificates, and Transfer, Fall 1996*. Hayward, CA: Chabot College.

Blau, J. R. (1999). Two-Year College Transfer Rates of Black American Students. *Community College Journal of Research and Practice*, 23. pp 525-531.

Boughan, K. (1995). *Tracking Student Progress at PGCC: Basic Findings of the 1990 Entering Cohort, Four-Year Academic Outcome Analysis*. Enrollment Analysis EA95-7. Largo, MD: Prince George's Community College.

Boughan, K. (1998). *New Approaches to the Analysis of Academic Outcomes: Modeling Student Performance at a Community College*. Paper presented at the annual forum of the Association for Institutional Research, Minneapolis, MN.

Camden County College One-Year Graduate Follow-Up Survey: 1993 Graduates. (1995). Camden, NJ: Camden County College.

Carlan, P. E. & Byxbe, F. R. (2000). Community Colleges Under the Microscope: An Analysis of Performance Predictors for Native and Transfer Students. *Community College Review*, 28(2). pp. 27-42.

Cathey, S. A. & Moody, B. (1994). *Garland County Community College Non-Returning Survey*. Hot Springs, AZ: Garland County Community College.

Cejda, B. D. & Kaylor, A. J. (1997). Academic Performance of Community College Transfer Students at Private Liberal Arts Colleges. *Community College Journal of Research and Practice*, 21. pp. 651-659.

Cicarelli, J. (1993). The Problems of Transfer Students. *Chronicle of Higher Education*. Online. Available: http://www.chronicle.com.

Community College Student Experiences Questionnaire. (2000). Online. Available: http://www.people.memphis.edu/%7Ecoe_CCSEQ_mainh.htm.

Community College Transfer Performance at JMU. (1998). Harrisonburg, VA: James Madison University.

Conklin, K. A. (1995). *Community College Students' Persistence and Goal Attainment: A Five-Year Longitudinal Study*. AIR Professional File, No. 55.

Critical Success Factors for the North Carolina Community College System, 1995. (1995). Sixth Annual Report. Raleigh: North Carolina Community College System.

Dupaw, C. & Michael, W. B. (1995). Community College Transfer Students: Comparing Admission and Success. *College and University*, 71(2). pp. 10-18.

Florida Articulation Summary. (1998). Tallahassee, FL: Articulation Accountability Committee of the Articulation Coordinating Committee.

Frank, J. (1998). *Howard Community College's 1992-1996 Transfer Graduates: A Trend Analysis*. Columbia, MD: Howard Community College.

Friedlander, J., Pace, C. R. & Lehman, P. W. (1990). *The Community College Student Experience Questionnaire*. Los Angeles, CA: Center for the Study of Student Evaluation, University of California.

Glover, J. W. (1996). *Campus Environment and Student Involvement as Predictors of Outcomes of the Community College Experience*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Memphis, TN.

The Graduate Survey, 1992-1993. (1995). St. Petersburg, FL: St. Petersburg Junior College.

Grosset, J. (1996). *As Assessment of Community College of Philadelphia's Effectiveness in Preparing Students for Transfer and Employment.* Institutional Research Report No. 92. Philadelphia, PA: Community College of Philadelphia.

Hankin, J. N. & Ford, J. C. (1995). *Westchester Community College Graduate Study.* Valhalla, NY: Westchester Community College.

Harbin, C. E. (1997). A Survey of Transfer Students at Four-Year Institutions Serving a California Community College. *Community College Review*, 25(2). pp 21-40.

Holloman, C. A. & Snowden, M. (1996). *Comparing Performance of Two-Year Community College Students to Four-Year Native Students.* Hattiesburg: University of Southern Mississippi.

Hoyt, J.E. (1999). Promoting Student Transfer Success: Curriculum Evaluation and Student Academic Preparation. *Journal of Applied Research in the Community College*, 6(2), pp. 73-79.

Kearney, G. W., Townsend, B. K., & Kearney, T. J. (1995). Multiple-Transfer Students in a Public Urban University: Background Characteristics and Interinstitutional Movements. *Research in Higher Education*, 36, pp. 323-344.

Kent Trumbull Student Transfer Behavior: Survey Results, Conclusions, and Implications. (1995). Warren, OH: Kent State University.

Kinnick, M. K., et al. (1997). *Student Transfer and Outcomes Between Community Colleges and a University in an Urban Environment.* Paper presented at the annual forum of the Association for Institutional Research, Orland, FL.

Kozeracki, C. A. & Gerdeman, R. D. (2000). *Transfer Readiness Research Project Focus Group Findings.* Unpublished Report. University of California, Los Angeles.

Laanan, F. S. (1997). *From Community College to University: A Comparative Study of Santa Monica College and Non-Santa Monica College Students.* Santa Monica, CA: Santa Monica College.

Laanan, F. S. (1999). *Does Age Matter? A Study of Transfer Students' College Experience and Adjustment Process.* Paper presented at the annual forum of the Association for Institutional Research, Seattle, WA.

Lanni, J. C. (1997). *Modeling Student Outcomes: A Longitudinal Study.* Paper presented at the annual forum of the Association for Institutional Research, Orlando, FL.

Lucas, J. A., Hull, E. & Brantley, F. (1995). *Follow-Up Study of Students Taking Honors Courses, 1990-1995.* Palatine, IL: William Rainey Harper College.

Mittler, M. L. & Bers, T. H. (1994). Qualitative Assessment: An Institutional Reality Check. In T. H. Bers and M. L. Mittler (Eds.) *Assessment and Testing: Myths and Realities, New Directions for Community Colleges*, No. 88. San Francisco: Jossey-Bass.

Mohammadi, J., Shaffer, B. & Farris, R. (1995). *Academic Performance of PHCC Students Transferring to Institutions of Higher Education.* Martinsville, VA: Patrick Henry Community College.

Murrell, P. H. & Glover, J. W. (1996). The Community College Experience: Assessing Process and Progress. *Community College Journal of Research and Practice*, 20, pp. 199-200.

No Show Student Survey. (1995). Livonia, MS: Schoolcraft College.

Nolan, E. J. & Hall, D. L. (1974). *A Follow-Up Study of Transfer Students from Southern West Virginia Community College to Marshall University.* Logan: Southern West Virginia Community College.

Porter, S. (1999). *Assessing Transfer and Native Student Performance at Four-Year Institutions.* Paper presented at the annual forum of the Association for Institutional Research, Seattle, WA.

Preston, D. L. (1993). *Using the CCSEQ in Institutional Effectiveness: The Role of Goal Commitment and Student's Perception of Gains.* Paper presented at the annual forum of the Association for Institutional Research, Chicago, IL.

Rasor, R. A. & Barr, J. E. (1995). *The Transfer Eligible Rate: Longitudinal Results of a Companion Measure to the Transfer Rate*. Sacramento, CA: American River College.

Report to Arizona, 1999. (1999). Phoenix, AZ: State Board of Directors for Community Colleges of Arizona.

Results of the 1999 Transfer Assembly. (2000). Los Angeles, CA: Center for the Study of Community Colleges.

Rice, S. (1996). Evaluating the "Colorado Core Transfer Program" as Public Policy. *Michigan Community College Journal: Research and Practice*, 2(2), pp. 63-72.

Rodriguez, J. C., et al. (1995). Intragroup Differences Between Black Native and Transfer Students at a Predominantly White University: Implications for Advising. *NACDA Journal*, 15(1), pp. 31-35.

Saupe, J. L. & Long, S. (1996). *Admissions Standards for Undergraduate Transfer Students: A Policy analysis*. Paper presented at the annual forum of the Association for Institutional Research, Albuquerque, NM.

Sigworth, D. (1995). *Student Withdrawal Study, Schoolcraft College*. Livonia, MS: Schoolcraft College.

Spice, S. L. & Armstrong, W. B. (1996). Transfer: The Elusive Denominator. In T. Rifkin (Ed.) *Transfer and Articulation: Improving Policies to Meet New Needs, New Directions for Community Colleges*, No. 96. San Francisco: Jossey-Bass.

Student Enrollments and Completions in the Illinois Community College System, Fiscal Year 1997. (1998). Springfield, IL: Illinois Community College Board.

Subbaccalaureate Persistence and Attainment: Indicator of the Month, NCES 98-01. (1997). Washington, D.C.: U.S. Department of Education.

Swoder, S. (1992). *Analysis of the Survey of Student Experiences at Saddleback College via the Community College Student Experiences Questionnaire (CCSEQ), Saddleback College Accreditation '92*. Mission Viejo, CA: Saddleback College.

Timmons, F. R. (1978). Freshman Withdrawal from College: A Positive Step Toward identity Formation? A Follow-Up Study. *Journal of Youth and Adolescence*, 7, pp. 159-173.

Traveling the Transfer Path: Student Experiences at City College of San Francisco. (1998). San Francisco, CA: City College of San Francisco.

Walters, J.E. & Shymoniak, L. *The Effectiveness of California Community Colleges on Selected Performance Measures, October 1996*. (1996). Sacramento, CA: Chancellor's Office, California Community Colleges.

Watkins, B.T. (1990). Two-Year Institutions Under Pressure to Ease Transfers. *Chronicle of Higher Education*. Online. Available: http://www.chronicle.com.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC
Educational Resources Information Center

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (1/2003)